



To: Eliza Cox  
Nutter McClennen & Fish LLP  
1471 Lyannough Road  
P.O. Box 1630  
Hyannis, MA 02601

Date: April 23, 2019

## Memorandum

Project #: 81787.19

From: Patrick Dunford, P.E.  
Senior Project Manager

Re: Traffic Evaluation  
Adventure Park at Heritage Museums and Gardens  
Sandwich, Massachusetts

Vanasse Hangen Brustlin, Inc. (VHB) is providing the following summary of transportation-engineering work conducted to date for the Adventure Park at Heritage Museums and Gardens facility in Sandwich, Massachusetts (the "Site"). Specifically, VHB previously had conducted traffic counts at both facilities in August 2015, early September 2016, and August 2017. No traffic data collection was conducted for the 2018 season by VHB.

Following a 2018 Barnstable Superior Court ruling, the Adventure Park ceased operation on August 31, 2018, but is now seeking a Special Permit to allow the facility to reopen. Prior to the most recent (August 2017) data collection, ongoing construction at both the Adventure Park (the "Project") and Heritage Museums and Gardens ("Heritage") was completed. With that construction, the access and parking for both uses was modified. This current study evaluates the general Site operation that was observed in 2017 following those improvements. Traffic counts conducted on Friday, August 11, 2017 at the Project Site driveways and Heritage driveways (as well as select nearby intersections) previously were reviewed and have been revisited as part of this current evaluation. Customer transaction data provided by the Heritage management for the Adventure Park at Heritage Museums and Gardens ("Adventure Park") also was evaluated. The following memorandum summarizes our findings.

### Summary of Conclusions

Based on traffic counts and three-year study of the area surrounding the Adventure Park, VHB conclude that there were minimal delays for motorists and that the Adventure Park component of the street traffic did not create any measurable significant impact on traffic operations in this area.

VHB's most recent 2017 traffic data collection revealed that traffic volumes on the roadways near Adventure Park remained relatively stable compared to the prior counts in 2015 and 2016. With 2017 changes to the access and parking lots serving Heritage and Adventure Park, there were notable changes to the observed parking lot volumes to the north and south of Shawme Road. These likely are a function of the increased parking capacity for the parking lots closest to Heritage. In 2017, the volume observed at the Overflow/Adventure Park parking lot decreased by 321 daily trips, while the volume at the lots closest to Heritage increased. This reallocation of volumes suggests that a substantial portion of the volume previously observed at that lot in 2015 and 2016 may have been associated with Heritage overflow parking, and not the Adventure Park.

Observations by VHB previously had identified a trend of visitors parking in the Overflow/Adventure Park lot and walking to the Heritage site. In 2017 VHB observed that 27 of the 37 vehicles entering the Overflow/Adventure Park lot (73-percent) during the peak hour of that lot originated from the exit-only driveway from the Oak and Birch lots. Based on these factors, a portion of the Overflow/Adventure Park lot use still likely was associated with the nearby Heritage use, and not the Adventure Park itself.

\\vhb\gb\prop\Watertown\81787.19\Correspondence\Traffic evaluation.docx

RECEIVED

APR 23 2019

BOARD OF APPEALS

101 Walnut Street  
PO Box 9151  
Watertown, MA 02472  
P 617.924.1770

VHB also studied vehicle speeds over the three-year period and found that speeds remained consistent during this time period, with the "85-percentile" speeds on Pine Street and Grove Street not exceeding 30 miles per hour in 2017.

Even if all the 53 peak-hour trips observed at the Overflow/Adventure Park lot driveway was associated solely with Adventure Park, that level of activity translates into less than one vehicle per minute traveling on the primary roadways used to travel to and from this site. Capacity analysis conducted in prior studies revealed that the representative unsignalized intersections studied along these roadways currently operate at "LOS A" conditions. This indicates that there were minimal delays for motorists and that the Adventure Park component of the street traffic has not created any measurable significant impact on traffic operations in this area. Even if the volumes on Pine Street, Grove Street, and/or Shawme Road increased to three times the 2017 observed level these intersections still would function at LOS A. As no such significant increases in street traffic are anticipated, these intersections should continue to operate acceptably from a capacity perspective for the foreseeable future.

## Existing Conditions

A site location map is provided in Figure 1 for reference. At the time of the 2015 initial development of the Project, there were three parking lots serving Heritage and the Adventure Park. However, during the time of the 2016 data collection a roughly 51-space lot to the southeast of Heritage was closed for construction. That construction was completed prior to the August 2017 counting program, and the following reconfigured three lots served the Heritage and Adventure Park facilities as of September 2017:

- **"Elm Lot"** - The northernmost lot is located between Grove Street and the main Heritage building. This paved parking lot now contains 45 striped parking spaces. With its prior configuration, approximately 65 spaces were provided, but internal site modifications involving roundabout construction reduced this supply. Access to and from this lot is provided by the internal roundabout located just east of a full access driveway which functions as the easterly leg of the adjacent Pine Street/Grove Street/Pocasset Street intersection. As of September 2017, the former driveway at the northerly end of this lot on Grove Street was no longer in operation and a chain was strung across this curb cut.
- **"Oak Lot"/"Birch Lot"** - A recently constructed parking lot with a total striped parking capacity of 125 vehicles is located south of the Elm Lot and north of and adjacent to Shawme Road. This lot replaced and expanded the former dirt parking lot in this area, which had an estimated capacity of approximately 51 vehicles. Access and egress to this lot are provided from the same internal roundabout intersection noted above, and by a new exit-only Shawme Road driveway located opposite a new driveway to Adventure Park, as discussed below. Signs are posted identifying the parking lot to the north of this driveway as the "Oak Lot" (with 59 spaces) while the southernmost "Birch Lot" area contains 66 parking spaces.
- **"Overflow Parking / Adventure Park" lot** - The southernmost parking lot servicing the Adventure Park and Heritage contains between 215 and 225 parking spaces in a grassed open area north of and adjacent to the Adventure Park customer service area. During August 2017 field visits by VHB, there was some striping delineating individual parking spaces, but those markings were mostly faded. As noted earlier, the access and egress to this parking area also was reconfigured as part of the recent Heritage and Project Site improvements. With those changes, an enter-only driveway is provided on Shawme Road opposite the Heritage exit-only driveway noted above. A non-standard graphic "Do Not Enter" sign is posted facing Adventure Park traffic that might wish to exit the site via that driveway, and smaller directional "exit" signs are

posted within the parking area pointing towards the southerly Pocasset Street driveway. That driveway configuration and location has remained unchanged, with it being approximately 875 feet to the south of the Pine Street/Grove Street/Pocasset Street intersection.

## **Traffic Data Collection**

As part of the August 2017 traffic data collection, VHB conducted automatic traffic recorder (ATR) counts on Pine Street and Grove Street to the south of Jonathan Lane, and on Shawme Road to the northwest of Highview Drive. These counts were conducted on Friday, August 11, 2017 to coincide with one of the regular "Family Fun Friday" promotion events held at Heritage.

## **Study Area Roadway Volumes**

The most recent roadway counts were conducted under VHB's direction for a continuous 24-hour period on Friday, August 11, 2017. These currently observed traffic volumes are summarized in Table 1 and compared to the volumes observed during the prior traffic data collection by VHB on these same roadways.

**Table 1 Study Area Roadways Observed Traffic Volume Summary – 2015 to 2017**

	Friday August 28, 2015 <sup>1</sup>				Friday September 2, 2016 <sup>2</sup>				Friday August 11, 2017 <sup>3</sup>			
	Peak Hour				Peak Hour				Peak Hour			
	<u>Daily</u> <sup>4</sup>	<u>Vol.</u> <sup>5</sup>	<u>"K"</u> <sup>6</sup>	<u>Dir. Dist.</u> <sup>7</sup>	<u>Daily</u>	<u>Vol.</u>	<u>"K"</u>	<u>Dir. Dist.</u>	<u>Daily</u>	<u>Vol.</u>	<u>"K"</u>	<u>Dir. Dist.</u>
<b><u>Grove Street:</u></b>												
NB	381	64			289	23			250	11		
<u>SB</u>	<u>406</u>	<u>38</u>			<u>339</u>	<u>76</u>			<u>361</u>	<u>93</u>		
Total	787	102	13.0	63% NB	628	99	15.8%	77% SB	611	104	17.0%	89% SB
<b><u>Pine Street:</u></b>												
NB	456	51			507	66			531	25		
<u>SB</u>	<u>425</u>	<u>65</u>			<u>460</u>	<u>46</u>			<u>416</u>	<u>64</u>		
Total	881	116	13.2	56% SB	967	112	11.6%	59% NB	947	89	9.4%	72% NB
<b><u>Shawme Road:</u></b>												
NB	132	15			144	18			131	26		
<u>SB</u>	<u>125</u>	<u>14</u>			<u>140</u>	<u>23</u>			<u>139</u>	<u>11</u>		
Total	257	29	11.3	52% NB	284	41	14.4%	56% SB	270	37	13.7%	70% NB

- 1 Automatic Traffic Recorder (ATR) counts conducted on August 28, 2015.
- 2 ATR counts conducted on Friday September 2, 2016.
- 3 ATR counts conducted on Friday August 11, 2017.
- 4 Daily traffic expressed in vehicles per day.
- 5 Peak hour volumes expressed in vehicles per hour.
- 6 "K" factor; percent of daily traffic, which occurs during the peak hour.
- 7 Directional distribution of traffic during peak hour.

As shown in Table 1, the observed study area roadway volumes have remained relatively stable over the three years during which VHB had conducted traffic counts while the Adventure Park was open. The 2017 observed combined volumes of Grove Street and Pine Street actually decreased by two-percent and seven-percent as compared to the respective 2016 and 2015 volumes on these roadways. Likewise, the observed Shawme Road volumes did not vary significantly with the 2017 volumes falling within fourteen vehicles per day of the prior counts. As shown in Figure 2, the 2017 counts showed that volumes gradually increased to a midday peak, and then decreased over the course of the afternoon. This pattern is similar to that previously observed on these roadways during the 2015 and 2016 counts.

### Observed Travel Speeds

VHB also conducted observations of travel speeds on Pine Street and Grove Street from 2015 through 2017. The speed measurements were collected in the same manner for each study, which did not allow for measurements of Shawme Road speeds. This was due to the physical condition of the road which required the underlying counting to be done using a video-based system that does not record speeds. The results of the speed measurements for Pine Street and Grove Street are summarized Table 2.

**Table 2 Observed Travel Speeds – 2015 to 2017**

	<b><u>Friday August 28, 2015<sup>1</sup></u></b>	<b><u>Friday, September 2, 2016<sup>2</sup></u></b>	<b><u>Friday, August 11, 2017<sup>3</sup></u></b>
<b><u>Pine Street:</u></b>			
Northbound	28 mph	27 mph	27 mph
Southbound	31 mph	29 mph	28 mph
<b><u>Grove Street:</u></b>			
Northbound	27 mph	28 mph	27 mph
Southbound	30 mph	30 mph	30 mph

1 Automatic Traffic Recorder (ATR) counts and speed measurements conducted on August 28, 2015.

2 ATR counts and speed measurements conducted on Friday September 2, 2016.

3 ATR counts and speed measurements conducted on Friday August 11, 2017.

The observed travel speeds listed in Table 2 are the observed “85<sup>th</sup> percentile” speeds. These represent the speeds which were only exceeded 15 percent of the time during the observation period, and this same standard is used by the Massachusetts Department of Transportation to establish speed limits. Based on the observations summarized in Table 2, the travel speeds along both roadways have remained relatively unchanged over the course of the three years that data was collected.

#### **Observed Traffic Volumes – “Overflow Parking / Adventure Park” lot**

VHB also conducted continuous counts on Friday, August 11, 2017 at the southernmost “Overflow Parking / Adventure Park” parking lot noted earlier. Table 3 provides a comparison of the observed 2017 driveway volumes to those counted by VHB in 2016.

**Table 3 Observed Traffic Volume Comparison –  
Southerly “Overflow Parking / Adventure Park” parking lot<sup>1</sup>**

Friday August 11, 2017 <sup>1</sup>				Friday September 2, 2016 <sup>2</sup>			Difference (2017 from 2016)		
Driveway:	Daily <sup>4</sup>	Peak Hour Volume <sup>3</sup>		Daily	Peak Hour Volume		Daily	Peak Hour Volume	
		Driveway Peak <sup>5</sup>	Roadway Peak <sup>6</sup>		Driveway Peak <sup>7</sup>	Roadway Peak <sup>8</sup>		Driveway Peak	Roadway Peak
<b><u>Shawme Road:</u></b>									
Enter	158	37	13	313	90	29	-155	-53	-16
Exit	<u>88</u>	<u>9</u>	<u>0</u>	<u>285</u>	<u>15</u>	<u>53</u>	<u>-197</u>	<u>-6</u>	<u>-53</u>
Total	246	46	13	598	105	82	-352	-59	-69
<b><u>Pocasset Street:</u></b>									
Enter	29	0	4	35	4	3	-6	-4	1
Exit	<u>100</u>	<u>7</u>	<u>9</u>	<u>63</u>	<u>13</u>	<u>4</u>	<u>37</u>	<u>-6</u>	<u>5</u>
Total	129	7	13	98	17	7	31	-10	6
<b><u>Total:</u></b>									
Enter	187	37	17	348	94	32	-161	-57	-15
Exit	<u>188</u>	<u>16</u>	<u>9</u>	<u>348</u>	<u>28</u>	<u>57</u>	<u>-160</u>	<u>-12</u>	<u>-48</u>
Total	375	53	26	696	122	89	-321	-69	-63

- 1 Automatic Traffic Recorder (ATR) counts conducted by VHB on August 11, 2017.
- 2 ATR counts conducted by VHB on Friday, September 2, 2016.
- 3 Peak hour volumes expressed in vehicles per hour.
- 4 Daily traffic expressed in vehicles per day.
- 5 Peak hour of Adventure Park driveways observed to have occurred between 11:00 AM and 12:00 PM (based on ATR counts conducted by VHB on August 11, 2017).
- 6 Volume of Adventure Park driveways during peak hour of roadway network occurring from 10:00 AM to 11:00 AM (based on ATR counts conducted by VHB on August 11, 2017).
- 7 Peak hour of Adventure Park driveways observed to have occurred between 10:30 AM and 11:30 AM (based on ATR counts conducted by VHB on September 2, 2016).
- 8 Volume of Adventure Park driveways during peak hour of roadway network occurring from 12:30 PM to 1:30 PM (based on ATR counts conducted by VHB on September 2, 2016).

As shown in Table 3, both the daily and (driveway) peak-hour volumes at the Overflow Parking/Adventure Park parking lot decreased by almost sixty-percent from 2016 to 2017. Potential factors contributing to this change are discussed later in this document. The counts also revealed that a regular portion of the parking lot traffic used the Shawme Road driveway to exit the Site, even though there is a single (non-standard) graphic “Do Not Enter” sign facing these visitors. The observed traffic volumes at these driveways over the course of the entire day studied are shown graphically in Figure 3.

### **Observed Traffic Volumes – Northerly Elm/Oak/Birch Parking Lots**

In conjunction with the 2017 counts noted above, VHB counted both the primary full-access driveway serving the main Heritage parking lots and the exit-only driveway from the southerly, "Oak/Birch" lot portion of that site on Friday, August 11, 2017. Table 4 provides a comparison of the currently observed 2017 driveway volumes to those counted by VHB at the parking lots to the north of Shawme Road in 2016.

**Table 4 Observed Traffic Volume Comparison –  
 Northerly Elm/Oak/Birch Parking Lots<sup>1</sup>**

Friday August 11, 2017 <sup>1</sup>				Friday September 2, 2016 <sup>2</sup>			Difference (2017 from 2016)		
Driveway:	Daily <sup>4</sup>	Peak Hour Volume <sup>3</sup>		Daily	Peak Hour Volume		Daily	Peak Hour Volume	
		Driveway	Roadway		Driveway	Roadway		Driveway	Roadway
		Peak <sup>5</sup>	Peak <sup>6</sup>		Peak <sup>7</sup>	Peak <sup>8</sup>		Peak	Peak
<b>Grove Street:</b>									
Enter	389	143	143	180	46	25	209	97	118
Exit	<u>253</u>	<u>5</u>	<u>5</u>	<u>180</u>	<u>4</u>	<u>25</u>	<u>73</u>	<u>1</u>	<u>-20</u>
Total	642	148	148	360	50	50	282	98	98
<b>Shawme Road:</b>									
Enter	25	0	0	N/A	N/A	N/A	389	143	143
Exit	<u>159</u>	<u>7</u>	<u>7</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>253</u>	<u>5</u>	<u>5</u>
Total	184	7	7	N/A	N/A	N/A	642	148	148
<b>Total:</b>									
Enter	<b>414</b>	<b>143</b>	<b>143</b>	<b>180</b>	<b>46</b>	<b>25</b>	<b>234</b>	<b>97</b>	<b>118</b>
Exit	<b><u>412</u></b>	<b><u>12</u></b>	<b><u>12</u></b>	<b><u>180</u></b>	<b><u>4</u></b>	<b><u>25</u></b>	<b><u>232</u></b>	<b><u>8</u></b>	<b><u>-13</u></b>
Total	<b>826</b>	<b>155</b>	<b>155</b>	<b>360</b>	<b>50</b>	<b>50</b>	<b>466</b>	<b>105</b>	<b>105</b>

N/A Shawme Road and (former) Pine Street driveways not in operation at time of 2016 counts due to construction.

1 Automatic Traffic Recorder (ATR) counts conducted by VHB on August 11, 2017.

2 ATR counts conducted by VHB on Friday, September 2, 2016.

3 Peak hour volumes expressed in vehicles per hour.

4 Daily traffic expressed in vehicles per day.

5 Peak hour of Heritage driveways observed to have occurred between 10:00 AM and 11:00 AM (based on ATR counts conducted by VHB on August 11, 2017).

6 Volume of Heritage driveways during peak hour of roadway network occurring from 10:00 AM to 11:00 AM (based on ATR counts conducted by VHB on August 11, 2017).

7 Peak hour of Heritage driveways observed to have occurred between 8:45 AM and 9:45 AM (based on ATR counts conducted by VHB on September 2, 2016).

8 Volume of Heritage driveways during peak hour of roadway network occurring from 12:30 PM to 1:30 PM (based on ATR counts conducted by VHB on September 2, 2016).

As shown in Table 4, both the 2017 daily and (driveway) peak-hour volumes at the Elm/Oak/Birch parking lots were two to three times higher than that counted by VHB in 2016 at the former driveways to the north of Shawme Road. Potential factors contributing to this change are discussed later in this document. Similar to the Overflow Parking/Adventure Park lot enter-only driveway, some visitors were observed to use the Shawme Road driveway to enter the Elm/Oak/Birch parking lot even though a single graphic "Do Not Enter" sign is posted facing the street. The observed parking lot traffic volumes over the course of the entire 2017 day studied are shown graphically in Figure 4.

## 2016 to 2017 – Overflow/Adventure Park and Elm/Oak/Birch Lots Volume Comparison

For comparison purposes, the changes in the observed traffic volumes at both the Overflow Parking/Adventure Park and Elm/Oak/Birch parking lots are shown in Figure 5.

### Parking Activity

The counting program for this evaluation involved the volume of cars entering and exiting each of the driveways for the Overflow Parking/Adventure Park and Elm/Oak/Birch lots being counted. With both lots being closed overnight, the number of parked cars within these lots reasonably can be determined by comparing the starting empty lots to the volume of entering and exiting cars throughout the day. The results number of parked cars within these lots is summarized in Table 5.

**Table 5 Typical 2017 Parking Occupancy<sup>1</sup>**

	<b><u>Overflow / Adventure Park lot</u></b>		<b><u>Elm / Oak / Birch lots</u></b>	
	<b><u>Parked vehicles</u></b>	<b><u>Percent Occupied</u></b>	<b><u>Parked vehicles</u></b>	<b><u>Percent Occupied</u></b>
7 AM	10	5%	0	0%
8 AM	29	13%	10	6%
9 AM	35	16%	33	19%
10 AM	43	20%	164	96%
11 AM	64	30%	<b>183</b>	<b>108%</b>
12 PM	<b>69</b>	<b>32%</b>	140	82%
1 PM	55	26%	114	67%
2 PM	48	22%	88	52%
3 PM	41	19%	63	37%
4 PM	42	20%	22	13%
5 PM	35	16%	6	4%
6 PM	28	13%	4	2%
7 PM	5	2%	2	1%
<b>Total Supply:</b>	<b>215</b>		<b>170</b>	

<sup>1</sup> Automatic Traffic Recorder (ATR) counts conducted on Friday August 11, 2017.

As shown in Table 5, the Overflow/Adventure Park lot to the south of Shawme Road was no more than 32 percent occupied on the day studied. However, the Elm/Oak/Birch lots were operating at or near capacity between 10 AM and 12 PM. While no exact figure exists, it is standard engineering practice to consider parking lots near 85 percent occupancy as being near their functional capacity. With that level of activity there would be few available spaces for drivers to the point where they would have to search for an inordinate amount of time or circulate excessively to find

available parking. In this instance, that also likely would result in Heritage patrons following the signs directing to the overflow parking available on the other side of Shawme Road at the Overflow Parking/Adventure Park lot.

### **Overflow Parking/Adventure Park Parking Lot Visitor Origin**

The traffic counts for the ongoing studies were conducted using Video Collection Units. This system allows for traffic counting to occur through an automated video-based system, which also provides video records of the actual activity. VHB reviewed the video of Shawme Road's intersection with the Overflow Parking/Adventure Park and Elm/Oak/Birch parking lot driveways. Specifically, VHB observed conditions at this intersection for the 11:00 AM to 12:00 PM peak hour on Friday, August 11, 2017. The counts revealed that of the 37 vehicles entering the Overflow Parking/Adventure Park driveway, 27 vehicles (73-percent) were vehicles exiting the opposing Elm/Oak/Birch driveway and driving straight across Shawme Road into the Overflow Parking/Adventure Park parking lot. During this same time-period, VHB observed a regular pattern of pedestrians walking from that parking lot across the street into the Elm/Oak/Birch parking lot. Specifically, 17 groups of pedestrians were observed during this one-hour period. Several of the groups included adults with young children either walking or in strollers.

The activity discussed above is consistent with the previously observed pedestrian activity during the 2016 counts. At that time, VHB's also observed regular patterns of pedestrians walking to and from the southerly Shawme Road parking area. Based on those observations, it was concluded at that time that up to half of the vehicular traffic counted at the southerly parking lot driveway may have been associated with overflow parking from the nearby Heritage facility. The most recent 2017 observations confirm that a notable portion of the vehicles using the Overflow Parking/Adventure Park lot may be associated solely with Heritage visitors.

### **Adventure Park / Heritage Museum Transaction Data Review**

As with the prior studies of this area, VHB reviewed updated customer transaction data provided by the Heritage and Adventure Park management. The 2017 records spanned from April 13, 2017 through September 14, 2017 and consisted of daily total of tickets sold for Heritage Museum and Adventure Park separately, and well as "combo" tickets allowing for admission to both facilities. Based on this information, the day of the most recent traffic counting (August 11, 2017) was the 13<sup>th</sup> busiest day of the year for Heritage within this timeframe, and the 10<sup>th</sup> busiest day for the 2017 season for the Adventure Park.

On the day of the 2017 traffic counts, there were 601 museum tickets purchased, with an additional 18 "combo" tickets sold. By comparison, there were 327 individual climbing spots sold for the Adventure Park (including the 18 visitors that purchased the combo tickets). VHB's 2016 study had concluded that a lack of direct correlation between the observed traffic activity and number of transactions suggested that some of the traffic at the southerly Shawme Road lot may have been associated with Heritage. While some shared parking activity within the Overflow Parking/Adventure Park lot still exists, it likely is reduced since 2016 as shown by the 2017 counts. With that change, there was more of a proportional relationship in 2017 between the observed traffic volumes and tickets sold. At the Elm/Oak/Birch parking lot driveways there were 826 daily vehicle trips observed, with 601 Heritage tickets being sold on that same day. By comparison, 375 total trips (entering and exiting) were observed at the Overflow Parking/Adventure Park compared to 327 climbing spots being sold on the same day. Based on both the transactional data and observed driveway volumes, Heritage was generating the majority of traffic visiting this area for these uses.

VHB also compared 2018 transaction data for Heritage and Adventure Park to data from the prior year. To provide for a direct comparison, transactions were compared from the start of each year through the August 31<sup>st</sup> date that Adventure Park closed in 2018. This comparison revealed that the Heritage transactions decreased by five-percent in 2018 compared to the prior year, while the Adventure Park experienced a 23-percent decrease in attendance. Accordingly, with no further changes to the parking facilities or the surrounding roadways, VHB observed traffic operations during an above-average day for Adventure Park attendance in August 2018 to be relatively unchanged compared to 2017. Based on these observations and a review of the transaction data, it reasonably can be concluded that the Adventure Park had the same minimal traffic impact to the surrounding area as was determined in 2017.

## Capacity Analysis

In conjunction with the 2015 and 2016 traffic counting, VHB also had conducted capacity analyses to evaluate the quality of traffic flow. Specifically, intersection capacity analyses were conducted at three representative unsignalized intersections in the study area. The analysis results indicated that each of the following intersections was expected to operate with negligible delays and at "Level of Service" (LOS) A:

- Pine Street at Jonathan Lane
- Grove Street at Jonathan Lane
- Shawme Road at Highview Drive/ Shaker House Road

The most recent (2017) daily counts on Pine Street, Grove Street, and Shawme Road all decreased compared to the 2016 traffic counts. Jonathan Lane, Highview Drive, and Shaker House Road are low-volume, residential roadways whose volumes are likely predominantly associated with the number of residents on each road. As such, these volumes should not vary significantly from day to day, or year to year, in the absence of any new residential construction. Accordingly, with the volumes on these streets not changing, and the Pine Street, Grove Street, and Shawme Road volumes having decreased, the same LOS A conditions reasonably were assumed to still be in place in 2017. With the ongoing pattern of the study area roadway volumes remaining stable, these same LOS A conditions likely would occur with the reopening of the Adventure Park, assuming the same general Site operation that previously was in place. LOS A conditions represent the best operating (lowest delay) conditions which can occur. Even if the volumes on Pine Street, Grove Street, and Shawme Road were to be three times higher than their current level, each of these intersections still would operate at LOS A during the critical Friday peak hour. As volumes on these roads have remained stable and additional development on the intersecting side-streets is unlikely, LOS A conditions can be expected to continue for the foreseeable future.

## Conclusion

VHB's most recent 2017 traffic data collection revealed that traffic volumes on the roadways near Adventure Park remained relatively stable compared to the prior counts in 2015 and 2016. With 2017 changes to the access and parking lots serving Heritage and Adventure Park, there were notable changes to the observed parking lot volumes to the north and south of Shawme Road. These likely are a function of the increased parking capacity for the parking lots closest to Heritage. At the time of the 2016 counts, there were only 65 parking spaces in the lot immediately adjacent to Heritage, with a secondary 51-space dirt parking lot being closed due to construction. With the completion of that work, there are a total of 170 parking spaces to the north of Shawme Road in the Elm, Oak, and Birch lots. With the

increased parking capacity immediately adjacent to Heritage, the 2017 volume entering and exiting those lots increased by 466 daily trips compared to the 2016 counts. Likewise, the volume observed at the Overflow/Adventure Park lot decreased by 321 daily trips. This reallocation of volumes suggests that a substantial portion of the volume previously observed at that lot may have been associated with Heritage overflow parking, and not the Adventure Park by itself.

During the peak hour of the Overflow/Adventure Park lot VHB's 2017 counts revealed that 27 of the 37 vehicles entering that lot (73-percent) originated from the exit-only driveway from the Oak and Birch lots. Based on these factors, a notable portion of the Overflow/Adventure Park lot still likely was associated with the nearby Heritage use, and not the Adventure Park.

Even if all the 53 peak-hour trips observed at the Overflow/Adventure Park lot driveway were associated solely with Adventure Park, that level of activity translates into less than one vehicle per minute traveling on the primary roadways used to travel to and from this site. Capacity analysis conducted in prior studies revealed that the representative unsignalized intersections studied along these roadways currently operate at "LOS A" conditions. This indicates that there were minimal delays for motorists and that the Adventure Park component of the street traffic has not created any measurable significant impact on traffic operations in this area. Even if the volumes on Pine Street, Grove Street, and/or Shawme Road increased to three times the 2017 observed level (which is not anticipated) these intersections still would function at LOS A. As no such significant increases in street traffic are anticipated, these intersections should continue to operate acceptably from a capacity perspective for the foreseeable future.

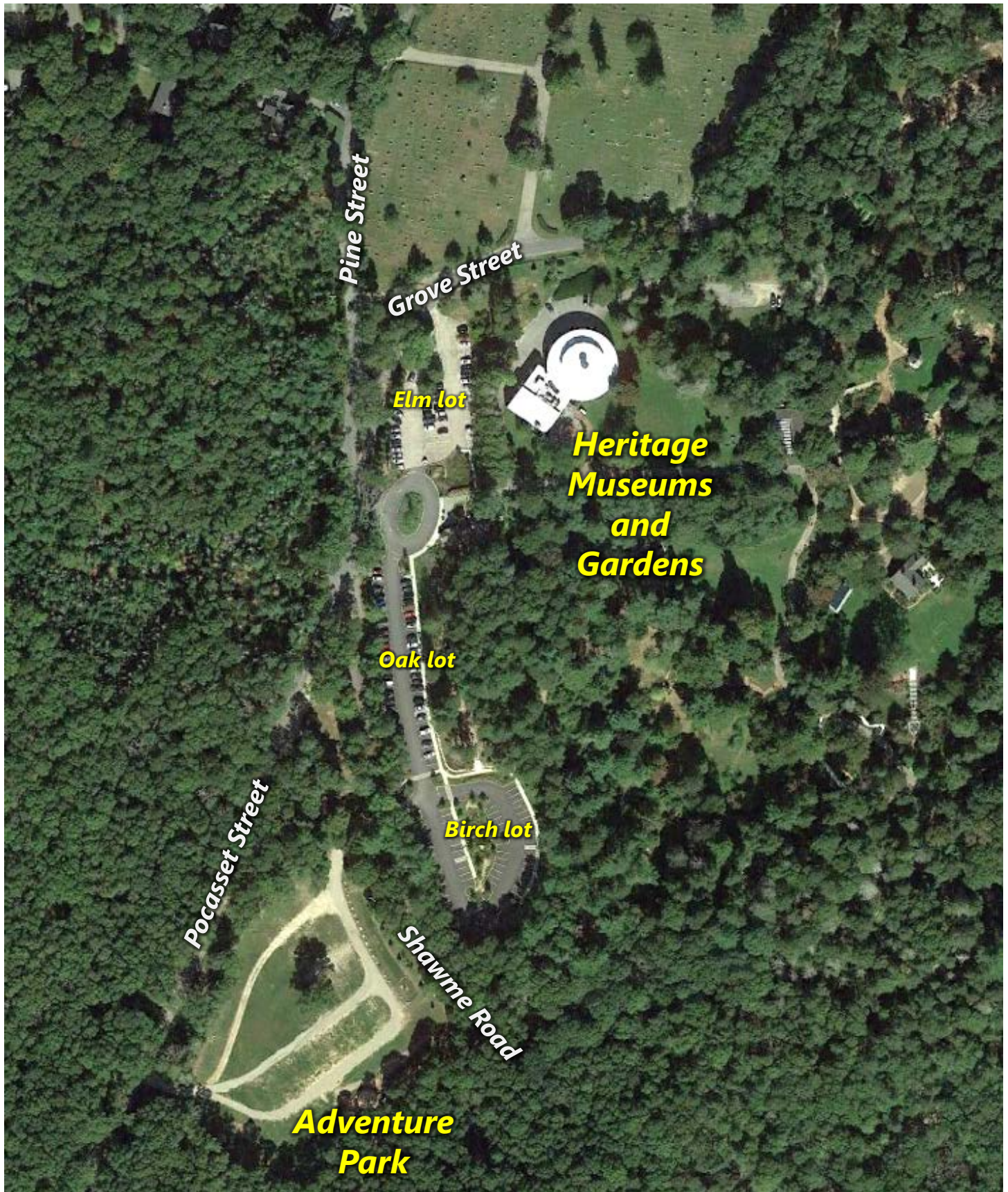


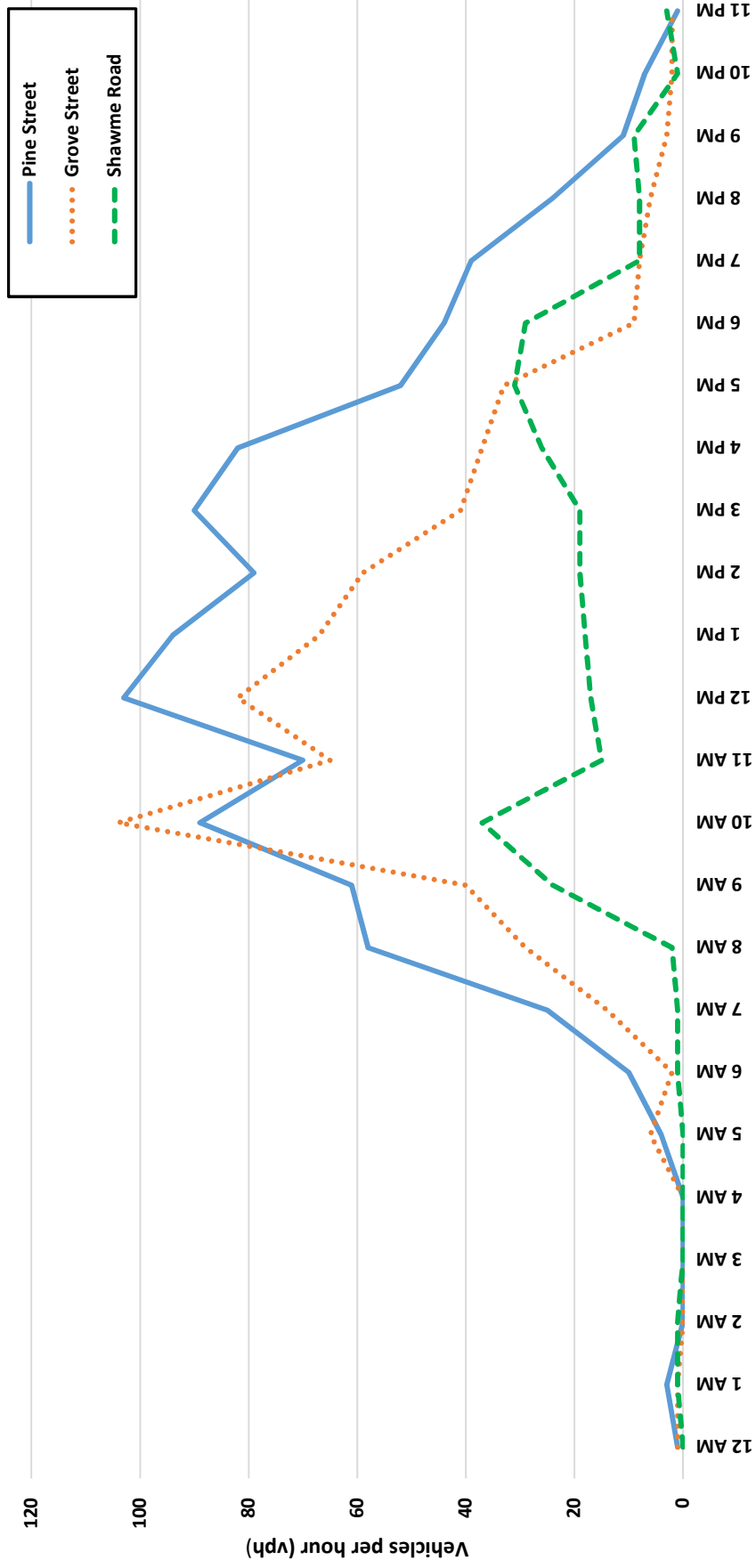
Image obtained from Google Earth  
(Imagery date October 5, 2018) © 2013 Google, Inc.



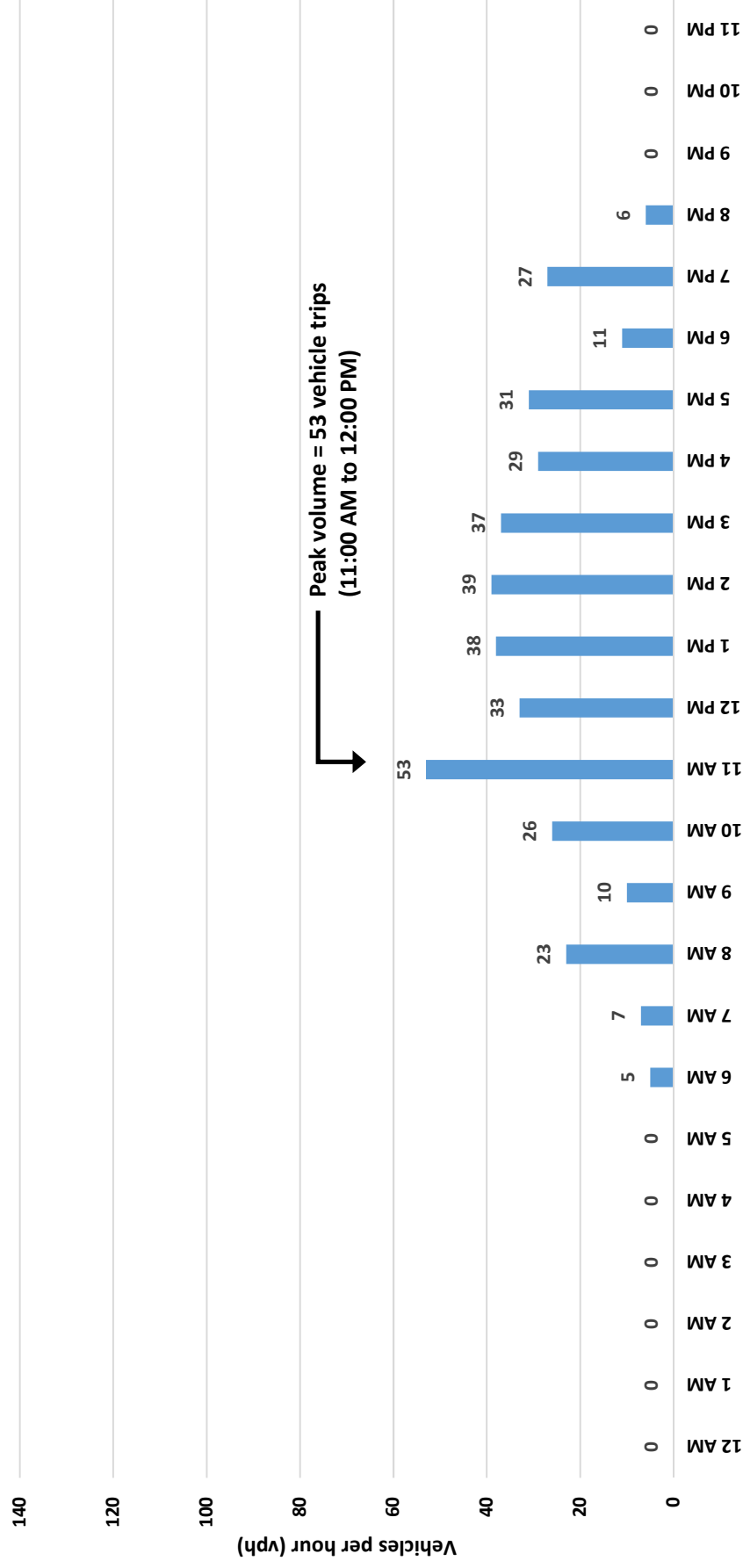
Site Location Map  
Adventure Park  
Sandwich, Massachusetts

**Figure 1**

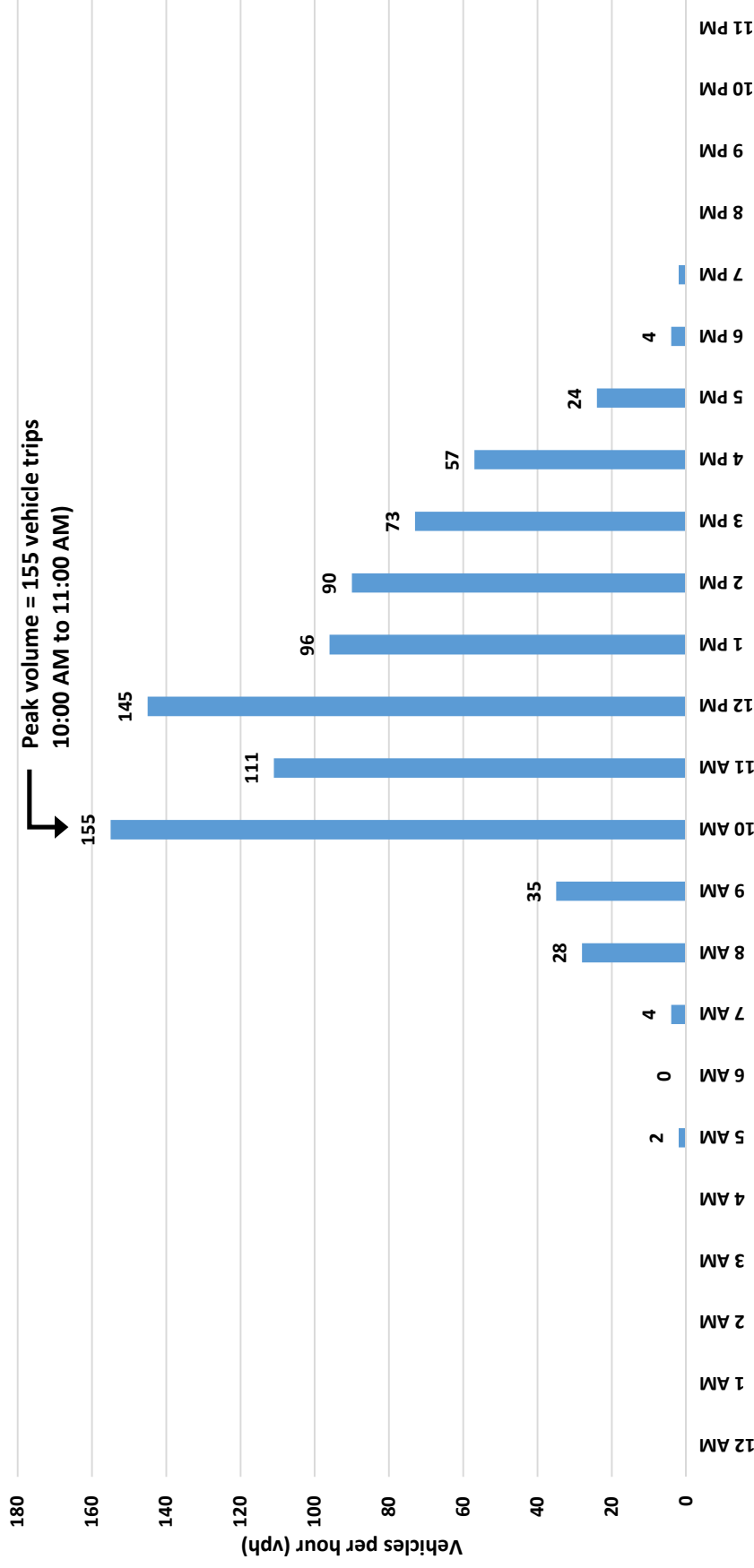
**Figure 2**  
**Friday August 11, 2017 Observed Traffic Volumes**



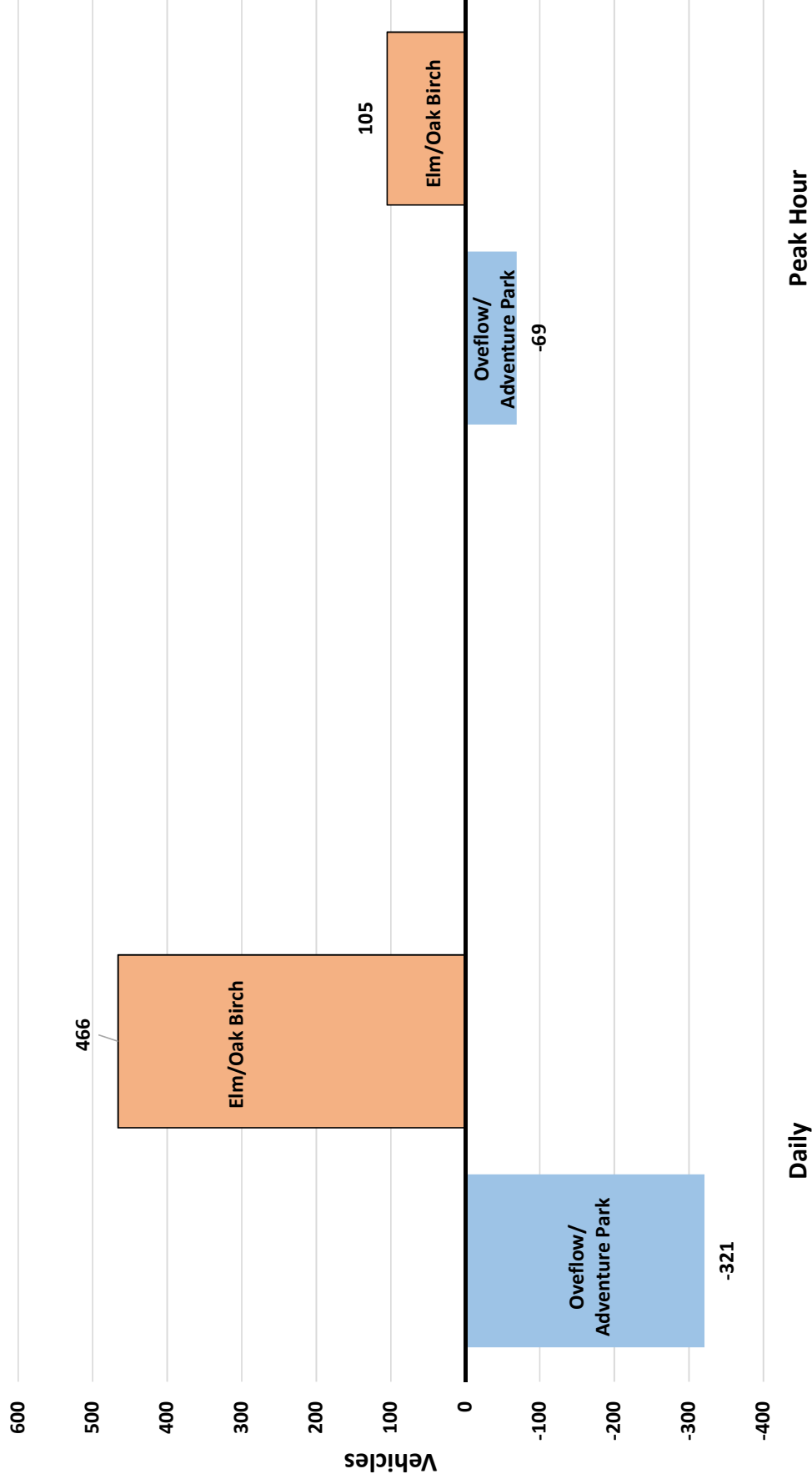
**Figure 3**  
**Friday August 11, 2017**  
**Observed Southerly Shawme Road Parking Lot Traffic Volumes**



**Figure 4**  
**Friday August 11, 2017**  
**Observed Northerly Grove Street Parking Lot Traffic Volumes**



**Figure 5**  
**Change from 2016 to 2017**  
**Overflow/Adventure Park and Elm/Oak/Birch lots**



## **APPENDIX**

- **2017 Appendix Material**
- **2016 Appendix Material**
- **2015 Appendix Material**

## **2017 APPENDIX**

- **Automatic Traffic Recorder Counts**
- **Parking Lot Occupancy**

➤ **Automatic Traffic Recorder Counts**

- **Pine Street**

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 A Volume  
Site Code: 13279

Start	NB				SB				Combined		08/11/17
Time	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.	Fri
12:00	0		11		0		7		0	18	
12:15	0		17		0		10		0	27	
12:30	0		21		0		5		0	26	
12:45	1	1	21	70	0	0	11	33	1	32	103
01:00	1		15		1		9		2	24	
01:15	1		13		0		10		1	23	
01:30	0		22		0		5		0	27	
01:45	0	2	14	64	0	1	6	30	0	20	94
02:00	0		12		0		7		0	19	
02:15	0		19		0		9		0	28	
02:30	0		10		0		8		0	18	
02:45	0	0	10	51	0	0	4	28	0	14	79
03:00	0		22		0		8		0	30	
03:15	0		10		0		6		0	16	
03:30	0		11		0		10		0	21	
03:45	0	0	14	57	0	0	9	33	0	23	90
04:00	0		11		0		8		0	19	
04:15	0		16		0		11		0	27	
04:30	0		15		0		7		0	22	
04:45	0	0	8	50	0	0	6	32	0	14	82
05:00	1		10		2		6		3	16	
05:15	1		12		0		3		1	15	
05:30	0		6		0		3		0	9	
05:45	0	2	5	33	0	2	7	19	0	12	52
06:00	2		6		1		3		3	9	
06:15	2		6		1		3		3	9	
06:30	2		9		0		10		2	19	
06:45	0	6	5	26	2	4	2	18	2	7	44
07:00	2		4		1		2		3	6	
07:15	4		9		1		1		5	10	
07:30	5		9		5		5		10	14	
07:45	3	14	6	28	4	11	3	11	7	9	39
08:00	3		3		5		4		8	7	
08:15	4		2		6		1		10	3	
08:30	5		5		9		6		14	11	
08:45	7	19	1	11	19	39	2	13	26	3	24
09:00	12		0		10		2		22	2	
09:15	5		2		5		1		10	3	
09:30	8		3		7		1		15	4	
09:45	2	27	0	5	12	34	2	6	14	2	11
10:00	6		0		15		1		21	1	
10:15	5		1		16		1		21	2	
10:30	8		0		15		0		23	0	
10:45	6	25	1	2	18	64	3	5	24	4	7
11:00	12		0		14		0		26	0	
11:15	10		0		6		0		16	0	
11:30	5		0		6		0		11	0	
11:45	11	38	0	0	6	32	1	1	17	1	1
Total	134		397		187		229		321	626	
Percent	41.7%		63.4%		58.3%		36.6%				
Day Total		531				416			947		
Peak	11:00	-	00:15	-	10:00	-	03:30	-	10:15	-	00:15
Vol.	38	-	74	-	64	-	38	-	94	-	109
P.H.F.	0.792		0.881		0.889		0.864		0.904		0.852

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 A Class  
Site Code: 13279

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/11/1														
7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
06:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
07:00	0	7	6	0	1	0	0	0	0	0	0	0	0	14
08:00	0	12	7	0	0	0	0	0	0	0	0	0	0	19
09:00	1	14	12	0	0	0	0	0	0	0	0	0	0	27
10:00	0	17	3	1	3	0	0	1	0	0	0	0	0	25
11:00	1	23	14	0	0	0	0	0	0	0	0	0	0	38
12 PM	2	55	9	1	3	0	0	0	0	0	0	0	0	70
13:00	0	48	16	0	0	0	0	0	0	0	0	0	0	64
14:00	0	40	9	2	0	0	0	0	0	0	0	0	0	51
15:00	0	48	9	0	0	0	0	0	0	0	0	0	0	57
16:00	1	40	9	0	0	0	0	0	0	0	0	0	0	50
17:00	0	25	6	0	2	0	0	0	0	0	0	0	0	33
18:00	1	19	5	0	1	0	0	0	0	0	0	0	0	26
19:00	0	26	1	0	1	0	0	0	0	0	0	0	0	28
20:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
21:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	397	112	4	11	0	0	1	0	0	0	0	0	531
Percent	1.1%	74.8%	21.1%	0.8%	2.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	10:00	10:00			10:00						11:00
Vol.	1	23	14	1	3			1						38
PM Peak	12:00	12:00	13:00	14:00	12:00									12:00
Vol.	2	55	16	2	3									70

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 A Class  
Site Code: 13279

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/11/1														
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
07:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
08:00	1	28	9	0	1	0	0	0	0	0	0	0	0	39
09:00	0	23	9	1	1	0	0	0	0	0	0	0	0	34
10:00	2	47	11	1	3	0	0	0	0	0	0	0	0	64
11:00	0	23	9	0	0	0	0	0	0	0	0	0	0	32
12 PM	0	27	4	1	1	0	0	0	0	0	0	0	0	33
13:00	0	18	10	0	2	0	0	0	0	0	0	0	0	30
14:00	0	13	14	1	0	0	0	0	0	0	0	0	0	28
15:00	0	25	8	0	0	0	0	0	0	0	0	0	0	33
16:00	0	25	7	0	0	0	0	0	0	0	0	0	0	32
17:00	0	13	4	0	2	0	0	0	0	0	0	0	0	19
18:00	0	11	5	0	2	0	0	0	0	0	0	0	0	18
19:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
20:00	0	11	1	0	1	0	0	0	0	0	0	0	0	13
21:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	4	294	99	4	15	0	0	0	0	0	0	0	0	416
Percent	1.0%	70.7%	23.8%	1.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	10:00	10:00	09:00	10:00									10:00
Vol.	2	47	11	1	3									64
PM Peak		12:00	14:00	12:00	13:00									12:00
Vol.		27	14	1	2									33

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 A Speed  
Site Code: 13279

NB	Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/11/																	
17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	23	22
01:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	28	27
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	27	25
06:00	0	0	2	3	1	0	0	0	0	0	0	0	0	0	6	29	26
07:00	0	1	3	9	1	0	0	0	0	0	0	0	0	0	14	28	26
08:00	2	2	6	7	2	0	0	0	0	0	0	0	0	0	19	28	23
09:00	0	3	15	8	1	0	0	0	0	0	0	0	0	0	27	27	23
10:00	4	6	11	4	0	0	0	0	0	0	0	0	0	0	25	24	19
11:00	2	9	16	9	2	0	0	0	0	0	0	0	0	0	38	26	22
12 PM	2	16	33	17	2	0	0	0	0	0	0	0	0	0	70	26	22
13:00	4	15	26	16	3	0	0	0	0	0	0	0	0	0	64	26	22
14:00	4	11	28	6	2	0	0	0	0	0	0	0	0	0	51	24	21
15:00	1	10	31	13	2	0	0	0	0	0	0	0	0	0	57	26	22
16:00	6	11	22	9	2	0	0	0	0	0	0	0	0	0	50	25	20
17:00	5	3	12	12	1	0	0	0	0	0	0	0	0	0	33	27	21
18:00	1	6	12	4	2	1	0	0	0	0	0	0	0	0	26	27	22
19:00	1	2	9	13	3	0	0	0	0	0	0	0	0	0	28	28	25
20:00	0	2	3	6	0	0	0	0	0	0	0	0	0	0	11	27	24
21:00	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	27	25
22:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	27	25
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	32	97	234	143	24	1	0	0	0	0	0	0	0	0	531		
%	6.0%	18.3%	44.1%	26.9%	4.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	07:00	08:00										11:00		
Vol.	4	9	16	9	2										38		
PM Peak	16:00	12:00	12:00	12:00	13:00	18:00									12:00		
Vol.	6	16	33	17	3	1									70		

Stats

15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	27 MPH
95th Percentile :	28 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	377
Percent in Pace :	71.0%
Number of Vehicles > 25 MPH :	139
Percent of Vehicles > 25 MPH :	26.3%

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 A Speed  
Site Code: 13279

SB	Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/11/																	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	18	17
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	22	15
06:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	4	32	27
07:00	0	0	4	4	3	0	0	0	0	0	0	0	0	0	11	31	27
08:00	0	3	7	20	9	0	0	0	0	0	0	0	0	0	39	30	26
09:00	0	1	13	17	3	0	0	0	0	0	0	0	0	0	34	28	25
10:00	4	7	21	28	4	0	0	0	0	0	0	0	0	0	64	27	23
11:00	0	1	18	9	4	0	0	0	0	0	0	0	0	0	32	28	24
12 PM	0	3	16	13	1	0	0	0	0	0	0	0	0	0	33	27	24
13:00	1	6	10	8	3	2	0	0	0	0	0	0	0	0	30	29	24
14:00	0	1	13	8	5	1	0	0	0	0	0	0	0	0	28	30	26
15:00	1	1	13	17	1	0	0	0	0	0	0	0	0	0	33	27	24
16:00	1	2	14	12	3	0	0	0	0	0	0	0	0	0	32	28	24
17:00	3	1	5	8	2	0	0	0	0	0	0	0	0	0	19	28	23
18:00	1	0	9	4	3	1	0	0	0	0	0	0	0	0	18	31	25
19:00	0	1	5	5	0	0	0	0	0	0	0	0	0	0	11	27	24
20:00	1	2	3	6	1	0	0	0	0	0	0	0	0	0	13	28	23
21:00	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6	31	28
22:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5	30	25
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	28	27
Total	13	31	156	165	47	4	0	0	0	0	0	0	0	0	416		
%	3.1%	7.5%	37.5%	39.7%	11.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	10:00	08:00										10:00		
Vol.	4	7	21	28	9										64		
PM Peak	17:00	13:00	12:00	15:00	14:00	13:00									12:00		
Vol.	3	6	16	17	5	2									33		

Stats

15th Percentile :	19 MPH
50th Percentile :	24 MPH
85th Percentile :	28 MPH
95th Percentile :	32 MPH
Mean Speed(Average) :	24 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	321
Percent in Pace :	77.2%
Number of Vehicles > 25 MPH :	183
Percent of Vehicles > 25 MPH :	44.0%

- **Grove Street**

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 B Volume  
Site Code: 13279

Start	SB				NB				Combin ed		08/11/17		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Fri
12:00	0		11		0		11		0		22		
12:15	0		9		0		5		0		14		
12:30	0		14		0		16		0		30		
12:45	0	0	8	42	1	1	8	40	1	1	16	82	
01:00	1		6		0		9		1		15		
01:15	0		5		0		10		0		15		
01:30	0		7		0		11		0		18		
01:45	0	1	11	29	0	0	8	38	0	1	19	67	
02:00	0		8		0		8		0		16		
02:15	0		10		0		9		0		19		
02:30	0		4		0		9		0		13		
02:45	0	0	6	28	0	0	5	31	0	0	11	59	
03:00	0		8		0		5		0		13		
03:15	0		5		0		6		0		11		
03:30	0		4		0		7		0		11		
03:45	0	0	3	20	0	0	3	21	0	0	6	41	
04:00	0		2		0		10		0		12		
04:15	0		6		0		6		0		12		
04:30	0		2		0		4		0		6		
04:45	0	0	2	12	0	0	5	25	0	0	7	37	
05:00	0		5		2		10		2		15		
05:15	0		5		2		5		2		10		
05:30	0		1		0		4		0		5		
05:45	1	1	0	11	1	5	3	22	2	6	3	33	
06:00	1		1		0		1		1		2		
06:15	0		0		0		1		0		1		
06:30	1		1		0		4		1		5		
06:45	0	2	1	3	0	0	0	6	0	2	1	9	
07:00	4		1		0		1		4		2		
07:15	1		0		0		2		1		2		
07:30	1		0		1		1		2		1		
07:45	5	11	2	3	2	3	1	5	7	14	3	8	
08:00	6		1		1		2		7		3		
08:15	4		1		0		1		4		2		
08:30	2		0		1		1		3		1		
08:45	11	23	0	2	4	6	0	4	15	29	0	6	
09:00	9		1		4		2		13		3		
09:15	4		0		3		0		7		0		
09:30	6		0		3		0		9		0		
09:45	10	29	0	1	1	11	0	2	11	40	0	3	
10:00	14		1		2		0		16		1		
10:15	28		0		3		0		31		0		
10:30	27		0		3		0		30		0		
10:45	24	93	1	2	3	11	0	0	27	104	1	2	
11:00	8		0		2		0		10		0		
11:15	15		0		2		0		17		0		
11:30	9		0		9		0		18		0		
11:45	15	47	1	1	5	18	1	1	20	65	2	2	
Total	207		154		55		195		262		349		
Percent	79.0%		44.1%		21.0%		55.9%						
Day Total			361				250				611		
Peak	10:00	-	12:00	-	11:00	-	00:30	-	10:00	-	12:00	-	-
Vol.	93	-	42	-	18	-	43	-	104	-	82	-	-
P.H.F.	0.830		0.750		0.500		0.672		0.839		0.683		

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 B Class  
Site Code: 13279

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/11/1														
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
07:00	0	6	1	0	3	0	0	1	0	0	0	0	0	11
08:00	0	16	6	0	1	0	0	0	0	0	0	0	0	23
09:00	3	17	9	0	0	0	0	0	0	0	0	0	0	29
10:00	0	77	15	0	1	0	0	0	0	0	0	0	0	93
11:00	0	34	11	0	2	0	0	0	0	0	0	0	0	47
12 PM	0	33	5	0	3	1	0	0	0	0	0	0	0	42
13:00	0	25	2	0	2	0	0	0	0	0	0	0	0	29
14:00	0	23	5	0	0	0	0	0	0	0	0	0	0	28
15:00	0	15	4	0	1	0	0	0	0	0	0	0	0	20
16:00	0	8	3	0	1	0	0	0	0	0	0	0	0	12
17:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
18:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	272	65	0	19	1	0	1	0	0	0	0	0	361
Percent	0.8%	75.3%	18.0%	0.0%	5.3%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	10:00	10:00		07:00			07:00						10:00
Vol.	3	77	15		3			1						93
PM Peak		12:00	12:00		12:00	12:00								12:00
Vol.		33	5		3	1								42

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 B Class  
Site Code: 13279

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/11/1														
7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	2	0	1	0	0	0	0	0	0	0	0	5
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
08:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
09:00	1	8	2	0	0	0	0	0	0	0	0	0	0	11
10:00	0	6	5	0	0	0	0	0	0	0	0	0	0	11
11:00	0	15	2	0	1	0	0	0	0	0	0	0	0	18
12 PM	0	30	8	0	1	1	0	0	0	0	0	0	0	40
13:00	0	32	5	0	1	0	0	0	0	0	0	0	0	38
14:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
15:00	0	17	4	0	0	0	0	0	0	0	0	0	0	21
16:00	0	22	2	0	1	0	0	0	0	0	0	0	0	25
17:00	0	18	4	0	0	0	0	0	0	0	0	0	0	22
18:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
19:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
20:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	204	37	0	7	1	0	0	0	0	0	0	0	250
Percent	0.4%	81.6%	14.8%	0.0%	2.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	10:00		05:00									11:00
Vol.	1	15	5		1									18
PM Peak		13:00	12:00		12:00	12:00								12:00
Vol.		32	8		1	1								40

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 B Speed  
Site Code: 13279

SB

Start Time	14	15	20	25	30	35	40	45	50	55	60	65	70	Total	85th % ile	Ave Speed
	14	19	24	29	34	39	44	49	54	59	64	69	9999			
08/11/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	33	32
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	38	37
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	32	27
07:00	0	2	1	7	1	0	0	0	0	0	0	0	0	11	28	25
08:00	0	0	3	11	9	0	0	0	0	0	0	0	0	23	32	28
09:00	1	1	10	11	6	0	0	0	0	0	0	0	0	29	30	25
10:00	1	5	22	44	19	2	0	0	0	0	0	0	0	93	30	26
11:00	1	3	10	24	8	1	0	0	0	0	0	0	0	47	30	26
12 PM	0	3	17	16	5	1	0	0	0	0	0	0	0	42	28	25
13:00	1	5	14	8	0	1	0	0	0	0	0	0	0	29	26	23
14:00	0	4	7	13	4	0	0	0	0	0	0	0	0	28	28	25
15:00	0	3	5	10	2	0	0	0	0	0	0	0	0	20	28	25
16:00	0	0	3	6	2	1	0	0	0	0	0	0	0	12	31	27
17:00	0	1	6	2	2	0	0	0	0	0	0	0	0	11	29	24
18:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3	28	27
19:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3	31	29
20:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2	27	25
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	33	32
22:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	32	30
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
Total	4	27	101	159	63	7	0	0	0	0	0	0	0	361		
%	1.1%	7.5%	28.0%	44.0%	17.5%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	10:00	10:00	10:00	10:00								10:00		
Vol.	1	5	22	44	19	2								93		
PM Peak	13:00	13:00	12:00	12:00	12:00	12:00								12:00		
Vol.	1	5	17	16	5	1								42		

Stats

15th Percentile :	20 MPH
50th Percentile :	25 MPH
85th Percentile :	30 MPH
95th Percentile :	33 MPH
Mean Speed(Average) :	26 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	260
Percent in Pace :	72.0%
Number of Vehicles > 25 MPH :	197
Percent of Vehicles > 25 MPH :	54.6%

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 B Speed  
Site Code: 13279

NB	Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/11/																	
17	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	23	22
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	2	1	2	0	0	0	0	0	0	0	0	0	5	32	27
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3	21	19
08:00	0	0	4	2	0	0	0	0	0	0	0	0	0	0	6	26	24
09:00	0	1	6	3	1	0	0	0	0	0	0	0	0	0	11	27	24
10:00	2	0	4	4	1	0	0	0	0	0	0	0	0	0	11	28	22
11:00	1	2	9	4	2	0	0	0	0	0	0	0	0	0	18	28	23
12 PM	0	6	16	13	5	0	0	0	0	0	0	0	0	0	40	28	24
13:00	3	10	15	7	2	1	0	0	0	0	0	0	0	0	38	27	21
14:00	0	3	14	12	1	1	0	0	0	0	0	0	0	0	31	27	24
15:00	0	4	9	6	2	0	0	0	0	0	0	0	0	0	21	28	23
16:00	0	5	13	4	2	0	1	0	0	0	0	0	0	0	25	28	23
17:00	0	8	7	6	1	0	0	0	0	0	0	0	0	0	22	27	22
18:00	0	1	4	1	0	0	0	0	0	0	0	0	0	0	6	24	22
19:00	1	0	1	3	0	0	0	0	0	0	0	0	0	0	5	27	22
20:00	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	27	21
21:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	22	20
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	23	22
Total	8	43	109	68	19	2	1	0	0	0	0	0	0	0	250		
%	3.2%	17.2%	43.6%	27.2%	7.6%	0.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	07:00	11:00	10:00	05:00										11:00		
Vol.	2	2	9	4	2										18		
PM Peak	13:00	13:00	12:00	12:00	12:00	13:00	16:00								12:00		
Vol.	3	10	16	13	5	1	1								40		

Stats

15th Percentile :	17 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	31 MPH
Mean Speed(Average) :	23 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	177
Percent in Pace :	70.8%
Number of Vehicles > 25 MPH :	76
Percent of Vehicles > 25 MPH :	30.6%

- **Shawme Road**

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 C Volume  
Site Code: 13279

Start		NB		SB		Combin		ed		08/11/17		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	Fri
12:00	0		0		0		3		0		3	
12:15	0		2		0		3		0		5	
12:30	0		2		0		3		0		5	
12:45	0	0	2	6	0	0	2	11	0	0	4	17
01:00	0		0		1		5		1		5	
01:15	0		3		0		2		0		5	
01:30	0		3		0		2		0		5	
01:45	0	0	3	9	0	1	2	11	0	1	5	20
02:00	0		1		0		3		0		4	
02:15	0		2		0		3		0		5	
02:30	0		0		0		4		0		4	
02:45	0	0	1	4	0	0	4	14	0	0	5	18
03:00	0		2		0		5		0		7	
03:15	0		4		0		6		0		10	
03:30	0		3		0		9		0		12	
03:45	0	0	3	12	0	0	3	23	0	0	6	35
04:00	0		0		0		4		0		4	
04:15	0		3		0		6		0		9	
04:30	0		1		0		4		0		5	
04:45	0	0	2	6	0	0	6	20	0	0	8	26
05:00	0		3		0		5		0		8	
05:15	1		2		0		6		1		8	
05:30	0		1		0		2		0		3	
05:45	0	1	0	6	0	0	2	15	0	1	2	21
06:00	0		0		0		1		0		1	
06:15	1		2		0		0		1		2	
06:30	0		0		0		3		0		3	
06:45	1	2	0	2	0	0	1	5	1	2	1	7
07:00	0		1		0		1		0		2	
07:15	1		0		0		2		1		2	
07:30	4		0		0		1		4		1	
07:45	4	9	1	2	1	1	2	6	5	10	3	8
08:00	2		1		0		3		2		4	
08:15	7		1		6		0		13		1	
08:30	3		0		1		0		4		0	
08:45	9	21	1	3	2	9	0	3	11	30	1	6
09:00	9		0		4		0		13		0	
09:15	5		0		4		0		9		0	
09:30	1		1		0		0		1		1	
09:45	2	17	0	1	1	9	1	1	3	26	1	2
10:00	8		0		2		1		10		1	
10:15	1		0		0		0		1		0	
10:30	7		0		0		1		7		1	
10:45	3	19	0	0	1	3	0	2	4	22	0	2
11:00	1		0		0		0		1		0	
11:15	4		0		1		0		5		0	
11:30	2		0		2		0		4		0	
11:45	4	11	0	0	2	5	0	0	6	16	0	0
Total	80		51		28		111		108		162	
Percent	74.1%		31.5%		25.9%		68.5%					
Day Total			131				139				270	
Peak	08:15	-	03:00	-	08:15	-	02:45	-	08:15	-	03:00	-
Vol.	28	-	12	-	13	-	24	-	41	-	35	-
P.H.F.	0.778		0.750		0.542		0.667		0.788		0.729	

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 C Class  
Site Code: 13279

NB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
08:00	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
09:00	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
10:00	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
11:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
12 PM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
13:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
14:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
15:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
16:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
17:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	131	0	0	0	0	0	0	0	0	0	0	0	0	0	131
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	08:00														08:00
Vol.	21														21
PM															
Peak	15:00														15:00
Vol.	12														12

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 C Class  
Site Code: 13279

SB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
09:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
10:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
12 PM	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
13:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
14:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
15:00	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
16:00	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
17:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
18:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
19:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
20:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	139	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	08:00														08:00
Vol.	9														9
PM															
Peak	15:00														15:00
Vol.	23														23

- **Overflow/Adventure Park Lot driveway – southwest of Shawme Road**

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 F Volume  
Site Code: 13279

Start Time	EB		WB		Combin ed		08/11/17	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	0	0	0	5	0	5		
12:15	0	2	0	0	0	2		
12:30	0	0	0	7	0	7		
12:45	0	3	0	4	0	7	21	
01:00	0	2	0	0	0	2		
01:15	0	3	0	5	0	8		
01:30	0	2	0	3	0	5		
01:45	0	2	0	3	0	5	20	
02:00	0	3	0	2	0	5		
02:15	0	4	0	6	0	10		
02:30	0	4	0	4	0	8		
02:45	0	1	0	3	0	4	27	
03:00	0	5	0	1	0	6		
03:15	0	1	0	0	0	1		
03:30	0	4	0	5	0	9		
03:45	0	5	0	3	0	8	24	
04:00	0	3	0	2	0	5		
04:15	0	3	0	4	0	7		
04:30	0	0	0	3	0	3		
04:45	0	1	0	4	0	5	20	
05:00	0	1	0	5	0	6		
05:15	0	2	0	4	0	6		
05:30	0	4	0	1	0	5		
05:45	0	1	0	0	0	1	18	
06:00	0	1	0	0	0	1		
06:15	0	2	2	0	2	2		
06:30	0	2	1	1	1	3		
06:45	0	0	2	1	2	1	7	
07:00	0	1	1	0	1	1		
07:15	0	4	0	0	0	4		
07:30	0	5	1	0	1	5		
07:45	0	2	2	1	2	3	13	
08:00	0	3	5	0	5	3		
08:15	0	3	2	0	2	3		
08:30	0	0	2	0	2	0		
08:45	0	0	6	15	0	0	6	
09:00	0	0	3	0	3	0		
09:15	0	0	0	0	0	0		
09:30	0	0	1	0	1	0		
09:45	0	0	3	7	3	0	0	
10:00	0	0	2	0	2	0		
10:15	0	0	5	0	5	0		
10:30	0	0	3	0	3	0		
10:45	0	0	3	13	3	0	0	
11:00	3	0	3	0	6	0		
11:15	1	0	15	0	16	0		
11:30	3	0	8	0	11	0		
11:45	2	9	0	11	13	0	0	
Total	9	79	81	77	90	156		
Percent	10.0%	50.6%	90.0%	49.4%				
Day Total		88		158		246		
Peak	11:00	- 03:00	- 11:00	- 12:00	- 11:00	- 03:30	- - -	
Vol.	9	- 15	- 37	- 16	- 46	- 29	- - -	
P.H.F.	0.750	0.750	0.617	0.571	0.719	0.725		

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 F Class  
Site Code: 13279

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
12 PM	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
13:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
14:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
15:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
16:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
17:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
18:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
19:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
20:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	88	0	0	0	0	0	0	0	0	0	0	0	0	0	88
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	11:00														11:00
Vol.	9														9
PM															
Peak	15:00														15:00
Vol.	15														15

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 F Class  
Site Code: 13279

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
07:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
08:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
09:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
10:00	9	4	0	0	0	0	0	0	0	0	0	0	0	0	13
11:00	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
12 PM	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
13:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
14:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
15:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
16:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
17:00	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
18:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	153	5	0	0	0	0	0	0	0	0	0	0	0	0	158
Percent	96.8%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00													11:00
Vol.	37	4													37
PM Peak	12:00														12:00
Vol.	16														16

- **Overflow/Adventure Park Lot driveway – (east of Pocasset Street)**

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 G Volume  
Site Code: 13279

Start	EB				WB				Combin ed		08/11/17		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Fri
12:00	0		0		0		2		0		2		
12:15	0		1		0		3		0		4		
12:30	0		2		0		4		0		6		
12:45	0	0	0	3	0	0	0	9	0	0	0	12	
01:00	0		0		0		6		0		6		
01:15	0		0		0		2		0		2		
01:30	0		1		0		6		0		7		
01:45	0	0	0	1	0	0	3	17	0	0	3	18	
02:00	0		0		0		1		0		1		
02:15	0		1		0		5		0		6		
02:30	0		0		0		1		0		1		
02:45	0	0	0	1	0	0	4	11	0	0	4	12	
03:00	0		3		0		5		0		8		
03:15	0		2		0		2		0		4		
03:30	0		1		0		0		0		1		
03:45	0	0	0	6	0	0	0	7	0	0	0	13	
04:00	0		1		0		1		0		2		
04:15	0		0		0		2		0		2		
04:30	0		1		0		1		0		2		
04:45	0	0	0	2	0	0	3	7	0	0	3	9	
05:00	0		1		0		5		0		6		
05:15	0		1		0		6		0		7		
05:30	0		0		0		0		0		0		
05:45	0	0	0	2	0	0	0	11	0	0	0	13	
06:00	0		0		0		0		0		0		
06:15	0		0		0		0		0		0		
06:30	0		0		0		3		0		3		
06:45	0	0	0	0	0	0	1	4	0	0	1	4	
07:00	0		0		0		2		0		2		
07:15	0		0		1		6		1		6		
07:30	0		1		0		2		0		3		
07:45	2	2	0	1	0	1	3	13	2	3	3	14	
08:00	2		0		2		0		4		0		
08:15	2		0		0		0		2		0		
08:30	0		0		0		0		0		0		
08:45	2	6	0	0	0	2	0	0	2	8	0	0	
09:00	1		0		1		0		2		0		
09:15	0		0		0		0		0		0		
09:30	0		0		1		0		1		0		
09:45	0	1	0	0	0	2	0	0	0	3	0	0	
10:00	2		0		2		0		4		0		
10:15	0		0		2		0		2		0		
10:30	2		0		1		0		3		0		
10:45	0	4	0	0	4	9	0	0	4	13	0	0	
11:00	0		0		3		0		3		0		
11:15	0		0		1		0		1		0		
11:30	0		0		0		0		0		0		
11:45	0	0	0	0	3	7	0	0	3	7	0	0	
Total	13		16		21		79		34		95		
Percent	38.2%		16.8%		61.8%		83.2%						
Day Total			29				100				129		
Peak	07:30	-	02:45	-	10:15	-	01:00	-	10:00	-	02:15	-	-
Vol.	6	-	6	-	10	-	17	-	13	-	19	-	-
P.H.F.	0.750		0.500		0.625		0.708		0.813		0.594		

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 G Class  
Site Code: 13279

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
16:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	28	1	0	0	0	0	0	0	0	0	0	0	0	0	29
Percent	96.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	10:00													08:00
Vol.	6	1													6
PM Peak	15:00														15:00
Vol.	6														6

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 G Class  
Site Code: 13279

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:00	5	4	0	0	0	0	0	0	0	0	0	0	0	0	9
11:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
12 PM	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
13:00	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
14:00	10	1	0	0	0	0	0	0	0	0	0	0	0	0	11
15:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
16:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
17:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
18:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
19:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	94	6	0	0	0	0	0	0	0	0	0	0	0	0	100
Percent	94.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00													10:00
Vol.	7	4													9
PM Peak	13:00	14:00													13:00
Vol.	17	1													17

- **Elm/Oak/Birch Parking Lot driveway – east of Grove Street**

Herritage North Driveway  
 east Shawme Road/ Pocasset Street  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



PRECISION  
 D A T A  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

175807 D Volume  
 Site Code: 13279

Start	EB				WB				Combin ed		08/11/17	
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	Fri
12:00	0		11		0		17		0		28	
12:15	0		17		0		13		0		30	
12:30	0		14		0		21		0		35	
12:45	0	0	8	50	0	0	16	67	0	0	24	117
01:00	0		6		0		9		0		15	
01:15	0		9		0		13		0		22	
01:30	0		5		0		15		0		20	
01:45	0	0	12	32	0	0	10	47	0	0	22	79
02:00	0		7		0		9		0		16	
02:15	0		9		0		11		0		20	
02:30	0		7		0		12		0		19	
02:45	0	0	6	29	0	0	10	42	0	0	16	71
03:00	0		6		0		11		0		17	
03:15	0		3		0		10		0		13	
03:30	0		7		0		9		0		16	
03:45	0	0	5	21	0	0	9	39	0	0	14	60
04:00	0		4		0		16		0		20	
04:15	0		4		0		11		0		15	
04:30	0		0		0		0		0		0	
04:45	0	0	0	8	0	0	0	27	0	0	0	35
05:00	0		0		0		0		0		0	
05:15	0		0		0		0		0		0	
05:30	0		0		0		0		0		0	
05:45	1	1	0	0	1	1	0	0	2	2	0	0
06:00	0		0		0		0		0		0	
06:15	0		0		0		0		0		0	
06:30	0		0		0		0		0		0	
06:45	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0		0		0		0		0		0	
07:15	1		0		0		0		1		0	
07:30	1		0		1		0		2		0	
07:45	0	2	0	0	1	2	0	0	1	4	0	0
08:00	0		0		0		0		0		0	
08:15	5		0		0		0		5		0	
08:30	3		0		2		0		5		0	
08:45	9	17	0	0	4	6	0	0	13	23	0	0
09:00	3		0		2		0		5		0	
09:15	3		0		2		0		5		0	
09:30	5		0		1		0		6		0	
09:45	12	23	0	0	0	5	0	0	12	28	0	0
10:00	31		0		2		0		33		0	
10:15	38		0		1		0		39		0	
10:30	40		0		0		0		40		0	
10:45	34	143	0	0	2	5	0	0	36	148	0	0
11:00	23		0		3		0		26		0	
11:15	19		0		1		0		20		0	
11:30	9		0		4		0		13		0	
11:45	12	63	0	0	4	12	0	0	16	75	0	0
Total	249		140		31		222		280		362	
Percent	88.9%		38.7%		11.1%		61.3%					
Day Total		389				253			642			
Peak	10:00	-	12:00	-	11:00	-	12:00	-	10:00	-	12:00	-
Vol.	143	-	50	-	12	-	67	-	148	-	117	-
P.H.F.	0.894		0.735		0.750		0.798		0.925		0.836	

Herritage North Driveway  
 east Shawme Road/ Pocasset Street  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



PRECISION  
 D A T A  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

175807 D Class  
 Site Code: 13279

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
09:00	21	2	0	0	0	0	0	0	0	0	0	0	0	0	23
10:00	141	2	0	0	0	0	0	0	0	0	0	0	0	0	143
11:00	63	0	0	0	0	0	0	0	0	0	0	0	0	0	63
12 PM	46	4	0	0	0	0	0	0	0	0	0	0	0	0	50
13:00	31	1	0	0	0	0	0	0	0	0	0	0	0	0	32
14:00	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
15:00	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
16:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	378	11	0	0	0	0	0	0	0	0	0	0	0	0	389
Percent	97.2%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	09:00													10:00
Vol.	141	2													143
PM Peak	12:00	12:00													12:00
Vol.	46	4													50

Herritage North Driveway  
 east Shawme Road/ Pocasset Street  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



PRECISION  
 D A T A  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

175807 D Class  
 Site Code: 13279

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
09:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
10:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
12 PM	63	4	0	0	0	0	0	0	0	0	0	0	0	0	67
13:00	46	1	0	0	0	0	0	0	0	0	0	0	0	0	47
14:00	42	0	0	0	0	0	0	0	0	0	0	0	0	0	42
15:00	39	0	0	0	0	0	0	0	0	0	0	0	0	0	39
16:00	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	245	8	0	0	0	0	0	0	0	0	0	0	0	0	253
Percent	96.8%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	05:00													11:00
Vol.	12	1													12
PM Peak	12:00	12:00													12:00
Vol.	63	4													67

- **Elm/Oak/Birch Parking Lot driveway – east of Shawme Road**

Herritage South Driveway  
east of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 E Volume  
Site Code: 13279

Start	EB				WB				Combin	08/11/17			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Fri
12:00	0		0		0		3		0		3		
12:15	0		1		0		6		0		7		
12:30	0		0		0		12		0		12		
12:45	0	0	0	1	0	0	6	27	0	0	6	28	
01:00	0		0		0		3		0		3		
01:15	0		3		0		7		0		10		
01:30	0		0		0		1		0		1		
01:45	0	0	0	3	0	0	3	14	0	0	3	17	
02:00	0		0		0		5		0		5		
02:15	0		2		0		4		0		6		
02:30	0		1		0		4		0		5		
02:45	0	0	0	3	0	0	3	16	0	0	3	19	
03:00	0		2		0		2		0		4		
03:15	0		0		0		2		0		2		
03:30	0		0		0		1		0		1		
03:45	0	0	1	3	0	0	5	10	0	0	6	13	
04:00	0		0		0		2		0		2		
04:15	0		0		0		1		0		1		
04:30	0		0		0		6		0		6		
04:45	0	0	0	0	0	0	13	22	0	0	13	22	
05:00	0		1		0		10		0		11		
05:15	0		1		0		5		0		6		
05:30	0		2		0		3		0		5		
05:45	0	0	0	4	0	0	2	20	0	0	2	24	
06:00	0		0		0		0		0		0		
06:15	0		1		0		0		0		1		
06:30	0		0		0		2		0		2		
06:45	0	0	0	1	0	0	1	3	0	0	1	4	
07:00	0		0		0		1		0		1		
07:15	0		0		0		0		0		0		
07:30	0		0		0		0		0		0		
07:45	0	0	0	0	0	0	1	2	0	0	1	2	
08:00	0		0		0		0		0		0		
08:15	1		0		2		0		3		0		
08:30	0		0		0		0		0		0		
08:45	1	2	0	0	1	3	0	0	2	5	0	0	
09:00	1		0		0		0		1		0		
09:15	4		0		1		0		5		0		
09:30	0		0		0		0		0		0		
09:45	1	6	0	0	0	1	0	0	1	7	0	0	
10:00	0		0		2		0		2		0		
10:15	0		0		2		0		2		0		
10:30	0		0		0		0		0		0		
10:45	0	0	0	0	3	7	0	0	3	7	0	0	
11:00	0		0		2		0		2		0		
11:15	1		0		13		0		14		0		
11:30	0		0		8		0		8		0		
11:45	1	2	0	0	11	34	0	0	12	36	0	0	
Total	10		15		45		114		55		129		
Percent	18.2%		11.6%		81.8%		88.4%						
Day Total		25				159				184			
Peak	08:30	-	02:15	-	11:00	-	04:30	-	11:00	-	04:30	-	-
Vol.	6	-	5	-	34	-	34	-	36	-	36	-	-
P.H.F.	0.375		0.417		0.654		0.654		0.643		0.692		

Herritage South Driveway  
east of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

175807 E Class  
Site Code: 13279

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
14:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	09:00														09:00
Vol.	6														6
PM															
Peak	17:00														17:00
Vol.	4														4

Herritage South Driveway  
 east of Shawme Road  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



PRECISION  
 D A T A  
 INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
 Office: 508-875-0100 Fax: 508-875-0118  
 Email: datarequests@pdillc.com

175807 E Class  
 Site Code: 13279

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/11/1															
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
11:00	34	0	0	0	0	0	0	0	0	0	0	0	0	0	34
12 PM	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
13:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
14:00	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
15:00	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
16:00	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
17:00	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
18:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	156	3	0	0	0	0	0	0	0	0	0	0	0	0	159
Percent	98.1%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00													11:00
Vol.	34	3													34
PM Peak	12:00														12:00
Vol.	27														27

➤ **Parking Lot Occupancy**

**Adventure Park Lot Driveways**  
**west of Shawme Road and east of Pocasset Street**  
**Parking Lot Occupancy**  
**Friday 8/11/2017**  
**City, State: Sandwich, MA**  
**Client: VHB/ P. Dunford**  
**Site Code: 13279**

		ATR-F	ATR-G	ATR-F	ATR-G	
	Total In Lot @ Start	Enter-from Shawme	Enter-from Pocasset	Exit-to Shawme Rd	Exit-to Pocasset St	Total In Lot @ End of
	of Interval	Rd	St			Interval
12:00 AM	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0
6:15 AM	0	2	0	0	0	2
6:30 AM	2	1	0	0	0	3
6:45 AM	3	2	0	0	0	5
7:00 AM	5	1	0	0	0	6
7:15 AM	6	0	0	0	1	5
7:30 AM	5	1	0	0	0	6
7:45 AM	6	2	2	0	0	10
8:00 AM	10	5	2	0	2	15
8:15 AM	15	2	2	0	0	19
8:30 AM	19	2	0	0	0	21
8:45 AM	21	6	2	0	0	29
9:00 AM	29	3	1	0	1	32
9:15 AM	32	0	0	0	0	32
9:30 AM	32	1	0	0	1	32
9:45 AM	32	3	0	0	0	35
10:00 AM	35	2	2	0	2	37
10:15 AM	37	5	0	0	2	40
10:30 AM	40	3	2	0	1	44
10:45 AM	44	3	0	0	4	43
11:00 AM	43	3	0	3	3	40
11:15 AM	40	15	0	1	1	53
11:30 AM	53	8	0	3	0	58
11:45 AM	58	11	0	2	3	64
12:00 PM	64	5	0	0	2	67

12:15 PM	67	0	1	2	3	63
12:30 PM	63	7	2	0	4	68
12:45 PM	68	4	0	3	0	69
1:00 PM	69	0	0	2	6	61
1:15 PM	61	5	0	3	2	61
1:30 PM	61	3	1	2	6	57
1:45 PM	57	3	0	2	3	55
2:00 PM	55	2	0	3	1	53
2:15 PM	53	6	1	4	5	51
2:30 PM	51	4	0	4	1	50
2:45 PM	50	3	0	1	4	48
3:00 PM	48	1	3	5	5	42
3:15 PM	42	0	2	1	2	41
3:30 PM	41	5	1	4	0	43
3:45 PM	43	3	0	5	0	41
4:00 PM	41	2	1	3	1	40
4:15 PM	40	4	0	3	2	39
4:30 PM	39	3	1	0	1	42
4:45 PM	42	4	0	1	3	42
5:00 PM	42	5	1	1	5	42
5:15 PM	42	4	1	2	6	39
5:30 PM	39	1	0	4	0	36
5:45 PM	36	0	0	1	0	35
6:00 PM	35	0	0	1	0	34
6:15 PM	34	0	0	2	0	32
6:30 PM	32	1	0	2	3	28
6:45 PM	28	1	0	0	1	28
7:00 PM	28	0	0	1	2	25
7:15 PM	25	0	0	4	6	15
7:30 PM	15	0	1	5	2	9
7:45 PM	9	1	0	2	3	5
8:00 PM	5	0	0	3	0	2
8:15 PM	2	0	0	3	0	-1
8:30 PM	-1	0	0	0	0	-1
8:45 PM	-1	0	0	0	0	-1
9:00 PM	-1	0	0	0	0	-1
9:15 PM	-1	0	0	0	0	-1
9:30 PM	-1	0	0	0	0	-1
9:45 PM	-1	0	0	0	0	-1
10:00 PM	-1	0	0	0	0	-1
10:15 PM	-1	0	0	0	0	-1
10:30 PM	-1	0	0	0	0	-1
10:45 PM	-1	0	0	0	0	-1
11:00 PM	-1	0	0	0	0	-1
11:15 PM	-1	0	0	0	0	-1
11:30 PM	-1	0	0	0	0	-1
11:45 PM	-1	0	0	0	0	-1
12:00 AM	-1					

**Herritage Lots**  
**east of Shawme Road**  
**Parking Lot Occupancy**  
**Friday 8/11/2017**  
**City, State: Sandwich, MA**  
**Client: VHB/ P. Dunford**  
**Site Code: 13279**

**\*\* North Driveway Entrance Coned off until 9:30AM**  
**Vehicles would still enter on exit side of driveway**

**\*\* North Driveway Enter/Exit Coned off @ 4:30pm**

		ATR-D	ATR-E	ATR-D	ATR-E	
	Total In Lot @ Start of Interval	Enter-North Drive	Enter-South Drive	Exit-North Drive	Exit-South Drive	Total In Lot @ End of Interval
12:00 AM	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0
5:45 AM	0	1	0	1	0	0
6:00 AM	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	1
7:30 AM	1	1	0	1	0	1
7:45 AM	1	0	0	1	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	5	1	0	2	4
8:30 AM	4	3	0	2	0	5
8:45 AM	5	9	1	4	1	10
9:00 AM	10	3	1	2	0	12
9:15 AM	12	3	4	2	1	16
9:30 AM	16	5	0	1	0	20
9:45 AM	20	12	1	0	0	33
10:00 AM	33	31	0	2	2	60
10:15 AM	60	38	0	1	2	95
10:30 AM	95	40	0	0	0	135
10:45 AM	135	34	0	2	3	164
11:00 AM	164	23	0	3	2	182
11:15 AM	182	19	1	1	13	188
11:30 AM	188	9	0	4	8	185
11:45 AM	185	12	1	4	11	183
12:00 PM	183	11	0	17	3	174

12:15 PM	174	17	1	13	6	173
12:30 PM	173	14	0	21	12	154
12:45 PM	154	8	0	16	6	140
1:00 PM	140	6	0	9	3	134
1:15 PM	134	9	3	13	7	126
1:30 PM	126	5	0	15	1	115
1:45 PM	115	12	0	10	3	114
2:00 PM	114	7	0	9	5	107
2:15 PM	107	9	2	11	4	103
2:30 PM	103	7	1	12	4	95
2:45 PM	95	6	0	10	3	88
3:00 PM	88	6	2	11	2	83
3:15 PM	83	3	0	10	2	74
3:30 PM	74	7	0	9	1	71
3:45 PM	71	5	1	9	5	63
4:00 PM	63	4	0	16	2	49
4:15 PM	49	4	0	11	1	41
4:30 PM	41	0	0	0	6	35
4:45 PM	35	0	0	0	13	22
5:00 PM	22	0	1	0	10	13
5:15 PM	13	0	1	0	5	9
5:30 PM	9	0	2	0	3	8
5:45 PM	8	0	0	0	2	6
6:00 PM	6	0	0	0	0	6
6:15 PM	6	0	1	0	0	7
6:30 PM	7	0	0	0	2	5
6:45 PM	5	0	0	0	1	4
7:00 PM	4	0	0	0	1	3
7:15 PM	3	0	0	0	0	3
7:30 PM	3	0	0	0	0	3
7:45 PM	3	0	0	0	1	2
8:00 PM	2	0	0	0	0	2
8:15 PM	2	0	0	0	0	2
8:30 PM	2	0	0	0	0	2
8:45 PM	2	0	0	0	0	2
9:00 PM	2	0	0	0	0	2
9:15 PM	2	0	0	0	0	2
9:30 PM	2	0	0	0	0	2
9:45 PM	2	0	0	0	0	2
10:00 PM	2	0	0	0	0	2
10:15 PM	2	0	0	0	0	2
10:30 PM	2	0	0	0	0	2
10:45 PM	2	0	0	0	0	2
11:00 PM	2	0	0	0	0	2
11:15 PM	2	0	0	0	0	2
11:30 PM	2	0	0	0	0	2
11:45 PM	2	0	0	0	0	2
12:00 AM	2					

## **2016 APPENDIX**

- **Automatic Traffic Recorder Counts (volumes/speeds)**
  
- **Capacity Analysis**



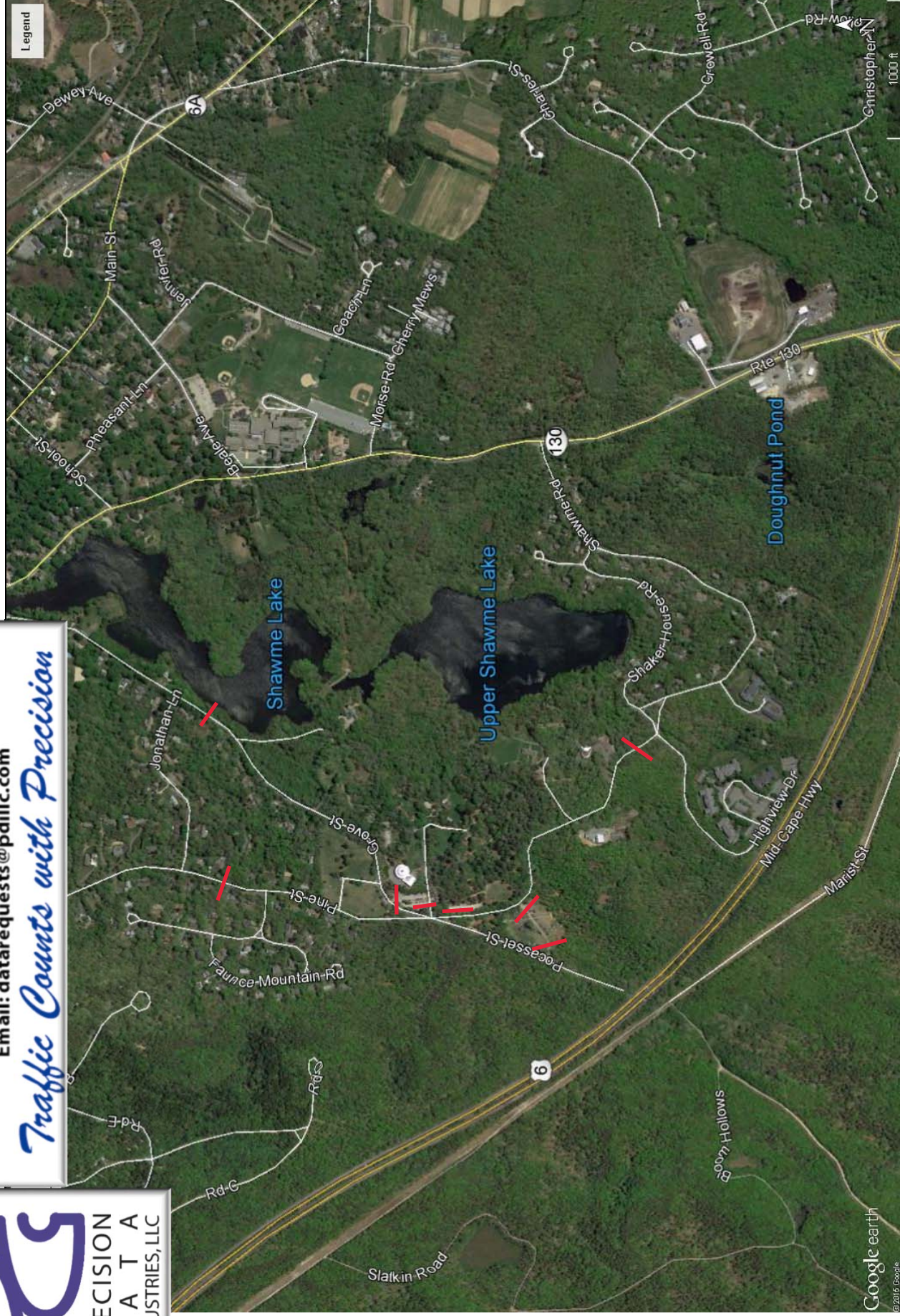
PRECISION  
DATA  
INDUSTRIES, LLC

PRECISION DATA INDUSTRIES, LLC

Office: 508.481.3999 Fax: 508.545.1234

Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

*Traffic Counts with Precision*



Client:  
VHB

Engineer:  
P. Dunford

Site Code:  
TBA

Date:  
Friday 9/2/16

PDI Job Number:  
165251

City, State:  
Sandwich, MA

➤ **Automatic Traffic Recorder Counts (volumes/speeds)**

- **Pine Street**



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

165251 A Volume  
Site Code: 13279

Start	NB				SB				Combined		9/2/2016	
Time	A.M.		P.M.		A.M.	P.M.			A.M.	P.M.	Fri	
12:00	0		11		0	12			0	23		
12:15	0		15		0	10			0	25		
12:30	0		9		1	18			1	27		
12:45	0	0	23	58	0	9	49		0	32	107	
01:00	0		19		0	6			0	25		
01:15	0		10		0	8			0	18		
01:30	0		16		0	12			0	28		
01:45	0	0	20	65	0	13	39		0	33	104	
02:00	0		18		0	10			0	28		
02:15	0		12		0	11			0	23		
02:30	0		13		0	3			0	16		
02:45	0	0	16	59	0	9	33		0	25	92	
03:00	0		11		0	9			0	20		
03:15	0		12		0	2			0	14		
03:30	0		10		0	7			0	17		
03:45	0	0	12	45	0	19	37		0	31	82	
04:00	1		14		0	11			1	25		
04:15	0		15		0	6			0	21		
04:30	1		18		0	3			1	21		
04:45	0	2	22	69	0	6	26		0	28	95	
05:00	1		6		0	9			1	15		
05:15	0		8		0	5			0	13		
05:30	1		5		0	5			1	10		
05:45	0	2	5	24	1	3	22		1	8	46	
06:00	2		5		0	4			2	9		
06:15	2		10		2	4			4	14		
06:30	0		3		1	4			1	7		
06:45	3	7	10	28	5	3	15		8	13	43	
07:00	2		8		1	4			3	12		
07:15	2		2		5	0			7	2		
07:30	6		3		4	1			10	4		
07:45	7	17	2	15	7	5	10		14	7	25	
08:00	7		1		10	9			17	10		
08:15	6		0		9	2			15	2		
08:30	7		0		4	1			11	1		
08:45	7	27	0	1	14	37	13		21	64	14	
09:00	2		0		9	0			11	0		
09:15	7		0		10	1			17	1		
09:30	3		0		12	0			15	0		
09:45	2	14	1	1	12	43	4		14	57	5	
10:00	9		0		13	3			22	3		
10:15	5		1		12	0			17	1		
10:30	7		1		12	2			19	3		
10:45	7	28	1	3	17	54	5		24	82	8	
11:00	19		0		9	0			28	0		
11:15	6		1		16	3			22	4		
11:30	5		1		7	1			12	2		
11:45	10	40	0	2	9	41	5		19	81	7	
Total	137		370		202	258			339	628		
Percent	40.4%		58.9%		59.6%	41.1%						
Day Total		507			460				967			
Peak	11:00	-	04:00	-	10:00	-	12:00	-	10:30	-	01:30	-
Vol.	40	-	69	-	54	-	49	-	93	-	112	-
P.H.F.	0.526		0.784		0.794		0.681		0.830		0.848	







PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford  
NB

165251 A Speed  
Site Code: 13279

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
09/02/ 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2	27	22
05:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2	27	25
06:00	0	2	2	3	0	0	0	0	0	0	0	0	0	7	27	23
07:00	0	1	11	4	1	0	0	0	0	0	0	0	0	17	27	23
08:00	0	3	10	11	3	0	0	0	0	0	0	0	0	27	28	25
09:00	0	1	5	7	1	0	0	0	0	0	0	0	0	14	28	25
10:00	0	7	10	11	0	0	0	0	0	0	0	0	0	28	27	23
11:00	0	7	21	12	0	0	0	0	0	0	0	0	0	40	26	23
12 PM	2	7	27	18	3	1	0	0	0	0	0	0	0	58	27	23
13:00	0	8	30	20	7	0	0	0	0	0	0	0	0	65	28	24
14:00	1	9	27	20	1	1	0	0	0	0	0	0	0	59	27	23
15:00	1	11	19	13	1	0	0	0	0	0	0	0	0	45	26	22
16:00	0	3	34	27	5	0	0	0	0	0	0	0	0	69	28	24
17:00	0	3	7	9	5	0	0	0	0	0	0	0	0	24	30	25
18:00	0	5	7	12	4	0	0	0	0	0	0	0	0	28	28	25
19:00	0	1	8	5	1	0	0	0	0	0	0	0	0	15	27	24
20:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
21:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
22:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3	27	25
23:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	32	27
Total	4	69	222	177	33	2	0	0	0	0	0	0	0	507		
%	0.8%	13.6%	43.8%	34.9%	6.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	11:00	11:00	08:00									11:00		
Vol.		7	21	12	3									40		
PM Peak	12:00	15:00	16:00	16:00	13:00	12:00								16:00		
Vol.	2	11	34	27	7	1								69		

Stats

15th Percentile :	19 MPH
50th Percentile :	23 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	24 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	399
Percent in Pace :	78.7%
Number of Vehicles > 25 MPH :	177
Percent of Vehicles > 25 MPH :	34.8%



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford  
SB

165251 A Speed  
Site Code: 13279

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
09/02/ 16	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	11	8
06:00	0	0	4	1	2	1	0	0	0	0	0	0	0	8	33	27
07:00	0	0	3	13	1	0	0	0	0	0	0	0	0	17	28	26
08:00	0	1	9	19	7	1	0	0	0	0	0	0	0	37	30	27
09:00	0	1	9	26	7	0	0	0	0	0	0	0	0	43	29	27
10:00	1	2	18	25	5	2	0	1	0	0	0	0	0	54	28	26
11:00	1	1	17	18	3	1	0	0	0	0	0	0	0	41	28	25
12 PM	1	2	18	22	6	0	0	0	0	0	0	0	0	49	28	25
13:00	1	3	14	13	7	1	0	0	0	0	0	0	0	39	30	25
14:00	2	2	11	14	4	0	0	0	0	0	0	0	0	33	28	24
15:00	0	1	14	15	7	0	0	0	0	0	0	0	0	37	30	26
16:00	0	1	10	7	8	0	0	0	0	0	0	0	0	26	31	26
17:00	1	1	8	8	3	1	0	0	0	0	0	0	0	22	30	25
18:00	0	0	6	7	2	0	0	0	0	0	0	0	0	15	28	26
19:00	0	0	3	6	1	0	0	0	0	0	0	0	0	10	28	26
20:00	0	2	3	7	1	0	0	0	0	0	0	0	0	13	28	25
21:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4	31	26
22:00	0	0	1	3	1	0	0	0	0	0	0	0	0	5	30	27
23:00	0	0	1	4	0	0	0	0	0	0	0	0	0	5	28	26
Total	8	17	152	209	66	7	0	1	0	0	0	0	0	460		
%	1.7%	3.7%	33.0%	45.4%	14.3%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	10:00	10:00	09:00	08:00	10:00		10:00						10:00		
Vol.	1	2	18	26	7	2		1						54		
PM Peak	14:00	13:00	12:00	12:00	16:00	13:00								12:00		
Vol.	2	3	18	22	8	1								49		

Stats

15th Percentile : 20 MPH  
50th Percentile : 25 MPH  
85th Percentile : 29 MPH  
95th Percentile : 32 MPH

Mean Speed(Average) : 26 MPH  
10 MPH Pace Speed : 20-29 MPH  
Number in Pace : 361  
Percent in Pace : 78.5%  
Number of Vehicles > 25 MPH : 241  
Percent of Vehicles > 25 MPH : 52.4%

- **Grove Street**



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

165251 B Volume  
Site Code: 13279

Start	SB		NB		Combin		ed		9/2/2016	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	0	5	0	8	0	13				
12:15	0	9	0	16	0	25				
12:30	0	5	0	18	0	23				
12:45	0	10	0	5	0	15	0	15	76	
01:00	0	10	0	5	0	15				
01:15	0	11	0	15	0	26				
01:30	0	9	0	11	0	20				
01:45	0	11	0	6	0	17	0	17	78	
02:00	0	7	0	10	0	17				
02:15	0	6	0	8	0	14				
02:30	0	4	0	9	0	13				
02:45	0	3	0	12	0	15	0	15	59	
03:00	0	4	1	12	1	16				
03:15	0	4	0	6	0	10				
03:30	0	7	0	8	0	15				
03:45	0	2	0	10	0	12	1	12	53	
04:00	0	0	0	4	0	4				
04:15	0	3	0	9	0	12				
04:30	0	4	0	6	0	10				
04:45	0	4	0	12	0	16	0	16	42	
05:00	0	4	0	9	0	13				
05:15	0	1	0	3	0	4				
05:30	0	0	0	6	0	6				
05:45	2	5	0	2	2	7	2	7	30	
06:00	1	3	3	1	4	4				
06:15	1	1	3	2	4	3				
06:30	0	1	2	1	2	2				
06:45	3	5	0	8	3	8	13	8	17	
07:00	0	1	0	1	0	2				
07:15	0	0	1	3	1	3				
07:30	5	1	2	0	7	1				
07:45	3	0	1	4	4	0	12	0	6	
08:00	3	0	0	0	3	0				
08:15	4	1	2	0	6	1				
08:30	5	0	0	1	5	1				
08:45	14	1	4	6	18	1	32	1	3	
09:00	6	0	1	0	7	0				
09:15	8	0	2	0	10	0				
09:30	11	2	1	0	12	2				
09:45	11	0	3	7	14	0	43	0	2	
10:00	18	1	4	2	22	3				
10:15	25	0	5	0	30	0				
10:30	19	0	9	0	28	0				
10:45	14	0	5	23	19	0	99	0	3	
11:00	14	0	5	0	19	0				
11:15	11	0	6	0	17	0				
11:30	9	0	1	0	10	0				
11:45	7	0	4	16	11	0	57	0	0	
Total	194	145	65	224	259	369				
Percent	74.9%	39.3%	25.1%	60.7%						
Day Total		339		289		628				
Peak	10:00	-	01:00	-	10:30	-	10:00	-	01:15	-
Vol.	76	-	41	-	25	-	99	-	80	-
P.H.F.	0.760		0.932		0.694		0.825		0.769	







PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford  
SB

165251 B Speed  
Site Code: 13279

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
09/02/																
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	32	27
06:00	0	0	2	1	2	0	0	0	0	0	0	0	0	5	32	27
07:00	0	1	3	3	1	0	0	0	0	0	0	0	0	8	28	24
08:00	0	2	11	11	2	0	0	0	0	0	0	0	0	26	28	24
09:00	0	8	3	15	8	2	0	0	0	0	0	0	0	36	31	26
10:00	2	7	29	31	7	0	0	0	0	0	0	0	0	76	28	24
11:00	0	7	9	17	7	1	0	0	0	0	0	0	0	41	30	25
12 PM	2	3	9	7	8	0	0	0	0	0	0	0	0	29	31	24
13:00	3	2	7	14	14	1	0	0	0	0	0	0	0	41	32	26
14:00	2	3	4	6	4	1	0	0	0	0	0	0	0	20	31	24
15:00	1	2	6	5	3	0	0	0	0	0	0	0	0	17	29	24
16:00	0	0	3	4	3	1	0	0	0	0	0	0	0	11	32	28
17:00	0	4	1	5	0	0	0	0	0	0	0	0	0	10	27	23
18:00	1	3	2	3	1	0	0	0	0	0	0	0	0	10	28	22
19:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2	23	22
20:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2	23	22
21:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2	32	25
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	18	17
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	11	44	94	122	62	6	0	0	0	0	0	0	0	339		
%	3.2%	13.0%	27.7%	36.0%	18.3%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	09:00	10:00	10:00	09:00	09:00								10:00		
Vol.	2	8	29	31	8	2								76		
PM Peak	13:00	17:00	12:00	13:00	13:00	13:00								13:00		
Vol.	3	4	9	14	14	1								41		

Stats

15th Percentile :	18 MPH
50th Percentile :	24 MPH
85th Percentile :	30 MPH
95th Percentile :	33 MPH
Mean Speed(Average) :	25 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	216
Percent in Pace :	63.7%
Number of Vehicles > 25 MPH :	166
Percent of Vehicles > 25 MPH :	48.8%



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford  
NB

165251 B Speed  
Site Code: 13279

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
09/02/ 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	18	17
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	2	0	5	1	0	0	0	0	0	0	0	0	0	8	23	19
07:00	0	0	1	2	1	0	0	0	0	0	0	0	0	4	31	27
08:00	0	1	4	1	0	0	0	0	0	0	0	0	0	6	24	22
09:00	0	1	3	3	0	0	0	0	0	0	0	0	0	7	27	23
10:00	5	10	7	1	0	0	0	0	0	0	0	0	0	23	22	17
11:00	2	4	6	4	0	0	0	0	0	0	0	0	0	16	26	20
12 PM	1	4	20	19	1	2	0	0	0	0	0	0	0	47	27	24
13:00	0	5	8	12	11	1	0	0	0	0	0	0	0	37	31	26
14:00	2	4	14	13	6	0	0	0	0	0	0	0	0	39	29	24
15:00	1	7	11	11	6	0	0	0	0	0	0	0	0	36	29	24
16:00	1	8	14	6	2	0	0	0	0	0	0	0	0	31	26	22
17:00	1	2	10	6	1	0	0	0	0	0	0	0	0	20	27	23
18:00	1	0	3	1	1	1	0	0	0	0	0	0	0	7	33	24
19:00	0	0	2	2	0	0	0	0	0	0	0	0	0	4	27	25
20:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2	11	8
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	18	47	109	82	29	4	0	0	0	0	0	0	0	289		
%	6.2%	16.3%	37.7%	28.4%	10.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	10:00	11:00	07:00									10:00		
Vol.	5	10	7	4	1									23		
PM Peak	14:00	16:00	12:00	12:00	13:00	12:00								12:00		
Vol.	2	8	20	19	11	2								47		

Stats

15th Percentile :	16 MPH
50th Percentile :	22 MPH
85th Percentile :	28 MPH
95th Percentile :	32 MPH
Mean Speed(Average) :	23 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	191
Percent in Pace :	66.1%
Number of Vehicles > 25 MPH :	99
Percent of Vehicles > 25 MPH :	34.1%

- **Shawme Road**



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

165251 C Volume  
Site Code: 13279

Start	SB		NB		Combin		ed		9/2/2016	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	0	3	0	2	0	5				
12:15	0	1	0	2	0	3				
12:30	0	6	0	9	0	15				
12:45	0	7	0	2	0	9	0	32		
01:00	0	3	0	3	0	6				
01:15	0	7	0	4	0	11				
01:30	0	7	0	2	0	9				
01:45	0	4	0	1	0	5	0	31		
02:00	0	2	0	2	0	4				
02:15	0	4	0	0	0	4				
02:30	0	3	1	2	1	5				
02:45	0	3	0	2	0	5	1	18		
03:00	0	3	0	3	0	6				
03:15	0	4	0	4	0	8				
03:30	0	4	0	1	0	5				
03:45	0	2	0	0	0	2	0	21		
04:00	0	3	0	0	0	3				
04:15	0	3	0	4	0	7				
04:30	0	3	0	3	0	6				
04:45	0	4	1	1	1	5	1	21		
05:00	0	7	0	1	0	8				
05:15	0	2	0	1	0	3				
05:30	0	2	0	2	0	4				
05:45	0	4	0	0	0	4	0	19		
06:00	0	0	0	1	0	1				
06:15	0	1	0	2	0	3				
06:30	0	2	0	0	0	2				
06:45	0	3	1	1	1	4	1	10		
07:00	0	6	1	1	1	7				
07:15	0	0	2	1	2	1				
07:30	0	0	2	1	2	1				
07:45	1	1	7	12	0	3	8	13	10	
08:00	1	3	2	0	3	3				
08:15	2	2	5	0	7	2				
08:30	1	0	3	0	4	0				
08:45	1	1	5	15	0	0	6	20	6	
09:00	1	0	2	0	3	0				
09:15	2	0	3	0	5	0				
09:30	3	0	3	0	6	0				
09:45	1	0	3	11	0	0	4	18	0	
10:00	0	0	4	0	4	0				
10:15	0	0	7	0	7	0				
10:30	2	0	7	1	9	1				
10:45	2	0	8	26	0	1	10	30	1	
11:00	1	0	6	0	7	0				
11:15	2	0	3	0	5	0				
11:30	7	0	5	0	12	0				
11:45	3	0	4	18	7	0	31	0	0	
Total	30	110	85	59	115	169				
Percent	26.1%	65.1%	73.9%	34.9%						
Day Total		140		144		284				
Peak	11:00	-	00:45	-	10:15	-	00:30	-	-	-
Vol.	13	-	24	-	28	-	34	-	41	-
P.H.F.	0.464	-	0.857	-	0.875	-	0.500	-	0.683	-



Page 1

165251 C Class  
Site Code: 13279

Start Time	Cars	Medium Heavy	Large Heavy											Total
09/02/1														
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	5	0	0	0	0	0	0	0	0	0	0	0	0	5
09:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
10:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00	11	2	0	0	0	0	0	0	0	0	0	0	0	13
12 PM	16	1	0	0	0	0	0	0	0	0	0	0	0	17
13:00	21	0	0	0	0	0	0	0	0	0	0	0	0	21
14:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
15:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
16:00	13	0	0	0	0	0	0	0	0	0	0	0	0	13
17:00	15	0	0	0	0	0	0	0	0	0	0	0	0	15
18:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
19:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
20:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	137	3	0	0	0	0	0	0	0	0	0	0	0	140
Percent	97.9%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	11:00												11:00
Vol.	11	2												13
PM Peak	13:00	12:00												13:00
Vol.	21	1												21



Page 2

165251 C Class  
Site Code: 13279

Start Time	Cars	Medium Heavy	Large Heavy											Total
09/02/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00	12	0	0	0	0	0	0	0	0	0	0	0	0	12
08:00	13	2	0	0	0	0	0	0	0	0	0	0	0	15
09:00	11	0	0	0	0	0	0	0	0	0	0	0	0	11
10:00	26	0	0	0	0	0	0	0	0	0	0	0	0	26
11:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
12 PM	13	2	0	0	0	0	0	0	0	0	0	0	0	15
13:00	10	0	0	0	0	0	0	0	0	0	0	0	0	10
14:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
15:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
16:00	8	0	0	0	0	0	0	0	0	0	0	0	0	8
17:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
18:00	4	0	0	0	0	0	0	0	0	0	0	0	0	4
19:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	140	4	0	0	0	0	0	0	0	0	0	0	0	144
Percent	97.2%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	08:00												10:00
Vol.	26	2												26
PM Peak	12:00	12:00												12:00
Vol.	13	2												15

- **Southerly Shawme Road Parking Lot driveway (west of Shawme Road)**



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Adventure Park Driveway  
west of Shawmee Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

165251 D Volume  
Site Code: 13249

Start	WB		EB		Combin		ed		9/2/2016	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	0	6	0	5	0	11				
12:15	0	6	0	7	0	13				
12:30	0	8	0	12	0	20				
12:45	0	8	0	14	0	22	0	66		
01:00	0	8	0	13	0	21				
01:15	0	5	0	14	0	19				
01:30	0	7	0	14	0	21				
01:45	0	6	0	15	0	21	0	82		
02:00	0	7	0	10	0	17				
02:15	0	6	0	12	0	18				
02:30	0	5	0	9	0	14				
02:45	0	6	0	8	0	14	0	63		
03:00	0	8	0	12	0	20				
03:15	0	4	0	13	0	17				
03:30	0	6	0	8	0	14				
03:45	0	3	0	10	0	13	0	64		
04:00	0	0	0	8	0	8				
04:15	0	2	0	6	0	8				
04:30	0	4	0	10	0	14				
04:45	0	1	0	5	0	6	0	36		
05:00	0	5	0	7	0	12				
05:15	0	0	0	2	0	2				
05:30	0	0	0	2	0	2				
05:45	0	1	0	3	0	4	0	20		
06:00	0	0	0	1	0	1				
06:15	0	0	0	4	0	4				
06:30	1	1	0	3	1	4				
06:45	1	2	0	5	1	7	2	16		
07:00	0	0	0	6	0	6				
07:15	0	0	1	0	1	0				
07:30	1	0	1	0	2	0				
07:45	3	4	2	0	5	0	8	6		
08:00	5	0	1	0	6	0				
08:15	5	0	4	0	9	0				
08:30	3	0	1	0	4	0				
08:45	5	18	3	9	8	0	27	0		
09:00	2	0	1	0	3	0				
09:15	8	0	4	0	12	0				
09:30	7	0	1	0	8	0				
09:45	14	31	3	9	17	0	40	0		
10:00	23	0	1	0	24	0				
10:15	18	0	3	0	21	0				
10:30	26	0	3	0	29	0				
10:45	26	93	1	8	27	0	101	0		
11:00	12	0	7	0	19	0				
11:15	26	0	4	0	30	0				
11:30	6	0	3	0	9	0				
11:45	6	50	3	17	9	0	67	0		
Total	198	115	47	238	245	353				
Percent	80.8%	32.6%	19.2%	67.4%						
Day Total		313		285		598				
Peak	10:00	-	00:15	-	11:00	-	01:00	-	10:30	-
Vol.	93	-	30	-	17	-	56	-	105	-
P.H.F.	0.894	-	0.938	-	0.607	-	0.933	-	0.875	-



Page 1

165251 D Class  
Site Code: 13249

Start Time	Cars	Medium Heavy	Large Heavy											Total
09/02/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00	2	2	0	0	0	0	0	0	0	0	0	0	0	4
08:00	18	0	0	0	0	0	0	0	0	0	0	0	0	18
09:00	31	0	0	0	0	0	0	0	0	0	0	0	0	31
10:00	92	1	0	0	0	0	0	0	0	0	0	0	0	93
11:00	49	1	0	0	0	0	0	0	0	0	0	0	0	50
12 PM	27	1	0	0	0	0	0	0	0	0	0	0	0	28
13:00	25	1	0	0	0	0	0	0	0	0	0	0	0	26
14:00	20	4	0	0	0	0	0	0	0	0	0	0	0	24
15:00	20	1	0	0	0	0	0	0	0	0	0	0	0	21
16:00	7	0	0	0	0	0	0	0	0	0	0	0	0	7
17:00	6	0	0	0	0	0	0	0	0	0	0	0	0	6
18:00	3	0	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	302	11	0	0	0	0	0	0	0	0	0	0	0	313
Percent	96.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AM Peak	10:00	07:00												10:00
Vol.	92	2												93
PM Peak	12:00	14:00												12:00
Vol.	27	4												28

[illegible]

- **Southerly Shawme Road Parking Lot driveway (east of Pocasset Street)**

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



165251 E Volume  
Site Code: 13279

Start	WB				EB				Combin ed		09/02/16		
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		Fri
12:00	0		2		0		0		0		2		
12:15	0		5		0		4		0		9		
12:30	0		1		0		1		0		2		
12:45	0	0	0	8	0	0	1	6	0	0	1	14	
01:00	0		1		0		0		0		1		
01:15	0		2		0		1		0		3		
01:30	0		2		0		1		0		3		
01:45	0	0	0	5	0	0	1	3	0	0	1	8	
02:00	0		7		0		3		0		10		
02:15	0		1		0		1		0		2		
02:30	0		3		0		1		0		4		
02:45	0	0	2	13	0	0	0	5	0	0	2	18	
03:00	0		3		0		1		0		4		
03:15	0		2		0		0		0		2		
03:30	0		1		0		0		0		1		
03:45	0	0	1	7	0	0	0	1	0	0	1	8	
04:00	0		1		0		0		0		1		
04:15	0		2		0		0		0		2		
04:30	0		2		0		0		0		2		
04:45	0	0	0	5	0	0	1	1	0	0	1	6	
05:00	0		2		0		1		0		3		
05:15	0		0		0		0		0		0		
05:30	0		0		0		0		0		0		
05:45	0	0	0	2	0	0	0	1	0	0	0	3	
06:00	0		0		0		0		0		0		
06:15	0		0		0		0		0		0		
06:30	0		1		0		1		0		2		
06:45	0	0	0	1	2	2	0	1	2	2	0	2	
07:00	0		3		0		0		0		3		
07:15	0		0		1		0		1		0		
07:30	0		0		0		0		0		0		
07:45	0	0	0	3	0	1	0	0	0	1	0	3	
08:00	0		0		2		0		2		0		
08:15	1		0		1		0		2		0		
08:30	0		0		1		0		1		0		
08:45	1	2	0	0	3	7	0	0	4	9	0	0	
09:00	0		0		0		0		0		0		
09:15	0		0		0		0		0		0		
09:30	0		0		0		0		0		0		
09:45	1	1	0	0	0	0	0	0	1	1	0	0	
10:00	2		0		2		0		4		0		
10:15	0		0		0		0		0		0		
10:30	3		0		1		0		4		0		
10:45	2	7	0	0	2	5	0	0	4	12	0	0	
11:00	5		0		1		0		6		0		
11:15	3		0		0		0		3		0		
11:30	0		0		1		0		1		0		
11:45	1	9	0	0	0	2	0	0	1	11	0	0	
Total	19		44		17		18		36		62		
Percent	52.8%		71.0%		47.2%		29.0%						
Day Total		63				35				98			
Peak	10:30	-	02:00	-	08:00	-	12:00	-	10:30	-	02:00	-	-
Vol.	13	-	13	-	7	-	6	-	17	-	18	-	-
P.H.F.	0.650		0.464		0.583		0.375		0.708		0.450		

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



165251 E Class  
Site Code: 13279

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
09/02/1															
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
11:00	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
12 PM	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
13:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
14:00	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
15:00	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
16:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	57	6	0	0	0	0	0	0	0	0	0	0	0	0	63
Percent	90.5%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00													11:00
Vol.	8	1													9
PM Peak	14:00	12:00													14:00
Vol.	12	1													13

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



165251 E Class  
Site Code: 13279

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
09/02/1															
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12 PM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
13:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
14:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	35	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	08:00														08:00
Vol.	7														7
PM															
Peak	12:00														12:00
Vol.	6														6

- **Northerly Grove Street Parking Lot driveway (east of Grove Street)**



PRECISION  
D A T A  
INDUSTRIES, LLC

46 Morton Street, Framingham, MA 01702  
Office: 508-875-0100 Fax: 508-875-0118  
Email: datarequests@pdillc.com

Heritage Museum Driveway  
south of Grove Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

165251 F Volume  
Site Code: 13279

Start	SB		NB		Combin		ed		9/2/2016	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Fri	
12:00	0	2	0	7	0	9				
12:15	0	1	0	6	0	7				
12:30	0	8	0	9	0	17				
12:45	0	6	0	8	0	14	0	47		
01:00	0	5	0	4	0	9				
01:15	0	6	0	4	0	10				
01:30	0	6	0	6	0	12				
01:45	0	10	0	7	0	17	0	48		
02:00	0	2	0	5	0	7				
02:15	0	5	0	5	0	10				
02:30	0	1	0	3	0	4				
02:45	0	2	0	6	0	8	0	29		
03:00	0	5	0	7	0	12				
03:15	0	2	0	5	0	7				
03:30	0	2	0	5	0	7				
03:45	0	9	0	7	0	16	0	42		
04:00	0	1	0	2	0	3				
04:15	0	2	0	7	0	9				
04:30	0	1	0	9	0	10				
04:45	0	3	0	13	0	16	0	38		
05:00	0	3	0	10	0	13				
05:15	0	0	0	3	0	3				
05:30	0	0	0	5	0	5				
05:45	2	0	1	0	3	0	3	21		
06:00	0	1	1	0	1	1				
06:15	0	0	0	1	0	1				
06:30	0	0	0	0	0	0				
06:45	2	1	0	1	2	2	3	4		
07:00	0	0	1	0	1	0				
07:15	1	0	0	0	1	0				
07:30	2	0	3	0	5	0				
07:45	1	0	2	6	3	0	10	0		
08:00	4	0	1	0	5	0				
08:15	5	0	2	0	7	0				
08:30	5	0	1	0	6	0				
08:45	14	0	3	7	0	0	35	0		
09:00	7	0	0	0	7	0				
09:15	9	0	0	0	9	0				
09:30	16	0	1	0	17	0				
09:45	3	0	2	3	5	0	38	0		
10:00	4	0	2	0	6	0				
10:15	3	0	1	0	4	0				
10:30	0	0	2	0	2	0				
10:45	5	0	0	5	5	0	17	0		
11:00	2	0	4	0	6	0				
11:15	2	0	4	0	6	0				
11:30	4	0	2	0	6	0				
11:45	5	0	2	0	7	0	25	0		
Total	96	84	35	145	131	229				
Percent	73.3%	36.7%	26.7%	63.3%						
Day Total		180		180		360				
Peak	08:45	-	01:00	-	04:15	-	00:30	-	-	-
Vol.	46	-	27	-	39	-	50	-	-	-
P.H.F.	0.719	-	0.675	-	0.750	-	0.735	-	-	-



Page 1

165251 F Class  
Site Code: 13279

[illegible]

[illegible]

## ➤ **Capacity Analysis**

- **Pine Street at Jonathan Lane**

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	6	41	2	4	31
Conflicting Peds, #/hr	1	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	40	40	75	75	78	78
Heavy Vehicles, %	0	0	0	50	0	5
Mvmt Flow	5	15	55	3	5	40
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	107	58	0	0	58	0
Stage 1	57	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	895	1014	-	-	1559	-
Stage 1	971	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	891	1012	-	-	1558	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	974	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	8.8	0		0.8		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	979	1558	-	
HCM Lane V/C Ratio	-	-	0.02	0.003	-	
HCM Control Delay (s)	-	-	8.8	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Adventure Park at Heritage Museums and Gardens  
1: Pine Street & Jonathan Road

Saturday Midday Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	1	35	1	1	40
Conflicting Peds, #/hr	6	6	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	75	75	79	79
Heavy Vehicles, %	25	0	3	0	0	0
Mvmt Flow	10	2	47	1	1	51
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	106	59	0	0	54	0
Stage 1	53	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.65	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	839	1012	-	-	1564	-
Stage 1	914	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	830	1002	-	-	1556	-
Mov Cap-2 Maneuver	830	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9.2		0		0.2	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	860	1556	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	9.2	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

- **Grove Street at Jonathan Lane**

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	4	1	4	48	6	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	42	87	87	70	70
Heavy Vehicles, %	25	0	0	0	0	0
Mvmt Flow	10	2	5	55	9	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	78	14	20	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.65	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	871	1072	1609	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	868	1072	1609	-	-	-
Mov Cap-2 Maneuver	868	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9	0.6		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1609	-	902	-	-	
HCM Lane V/C Ratio	0.003	-	0.013	-	-	
HCM Control Delay (s)	7.2	0	9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Adventure Park at Heritage Museums and Gardens  
2: Grove Street & Jonathan Road

Saturday Midday Peak

Intersection							
Int Delay, s/veh	0.6						
Movement	EBL	EBR		NBL	NBT	SBT	SBR
Vol, veh/h	1	2		0	24	44	4
Conflicting Peds, #/hr	1	1		1	0	0	1
Sign Control	Stop	Stop		Free	Free	Free	Free
RT Channelized	-	None		-	None	-	None
Storage Length	0	-		-	-	-	-
Veh in Median Storage, #	0	-		-	0	0	-
Grade, %	0	-		-	0	0	-
Peak Hour Factor	38	38		60	60	75	75
Heavy Vehicles, %	0	0		0	4	5	25
Mvmt Flow	3	5		0	40	59	5
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	102	63		65	0	-	0
Stage 1	62	-		-	-	-	-
Stage 2	40	-		-	-	-	-
Critical Hdwy	6.4	6.2		4.1	-	-	-
Critical Hdwy Stg 1	5.4	-		-	-	-	-
Critical Hdwy Stg 2	5.4	-		-	-	-	-
Follow-up Hdwy	3.5	3.3		2.2	-	-	-
Pot Cap-1 Maneuver	901	1007		1550	-	-	-
Stage 1	966	-		-	-	-	-
Stage 2	988	-		-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	899	1005		1549	-	-	-
Mov Cap-2 Maneuver	899	-		-	-	-	-
Stage 1	965	-		-	-	-	-
Stage 2	987	-		-	-	-	-
Approach	EB	NB			SB		
HCM Control Delay, s	8.8	0			0		
HCM LOS	A						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1549	-	967	-	-		
HCM Lane V/C Ratio	-	-	0.008	-	-		
HCM Control Delay (s)	0	-	8.8	-	-		
HCM Lane LOS	A	-	A	-	-		
HCM 95th %tile Q(veh)	0	-	0	-	-		

- **Shawme Road at Highview Drive**

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	7	5	0	9	4	6	2	1	2	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	41	41	41	88	88	88	75	75	75	88	88	88
Heavy Vehicles, %	0	0	20	0	0	0	17	0	100	0	0	0
Mvmt Flow	2	17	12	0	10	5	8	3	1	2	15	0
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	46	39	15	53	38	3	15	0	0	4	0	0
Stage 1	19	19	-	19	19	-	-	-	-	-	-	-
Stage 2	27	20	-	34	19	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.4	7.1	6.5	6.2	4.27	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.48	3.5	4	3.3	2.353	-	-	2.2	-	-
Pot Cap-1 Maneuver	961	857	1015	951	858	1087	1510	-	-	1631	-	-
Stage 1	1005	884	-	1005	884	-	-	-	-	-	-	-
Stage 2	996	883	-	987	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	944	852	1015	921	853	1087	1510	-	-	1631	-	-
Mov Cap-2 Maneuver	944	852	-	921	853	-	-	-	-	-	-	-
Stage 1	1000	883	-	1000	880	-	-	-	-	-	-	-
Stage 2	975	879	-	955	883	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.1			9			4.9			1		
HCM LOS	A			A								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1510	-	-	915	914	1631	-	-				
HCM Lane W/C Ratio	0.005	-	-	0.035	0.016	0.001	-	-				
HCM Control Delay (s)	7.4	0	-	9.1	9	7.2	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-				

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Saturday Midday Peak

Intersection									
Int Delay, s/veh	7								
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	2	8	2	1	7	9	3	2	0
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	71	71	71	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	11	3	1	10	13	5	3	0
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	31	20	8	27	22	4	9	0	0
Stage 1	7	7	-	13	13	-	-	-	-
Stage 2	24	13	-	14	9	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	982	878	1080	988	876	1085	1624	-	-
Stage 1	1020	894	-	1013	889	-	-	-	-
Stage 2	999	889	-	1011	892	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	958	875	1078	973	873	1084	1623	-	-
Mov Cap-2 Maneuver	958	875	-	973	873	-	-	-	-
Stage 1	1016	893	-	1010	886	-	-	-	-
Stage 2	973	886	-	996	891	-	-	-	-
Approach	EB			WB			NB		
HCM Control Delay, s	9			8.8			4.3		
HCM LOS	A			A					
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	1623	-	-	917	980	1631	-	-	
HCM Lane V/C Ratio	0.003	-	-	0.017	0.024	-	-	-	
HCM Control Delay (s)	7.2	0	-	9	8.8	0	-	-	
HCM Lane LOS	A	A	-	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-	

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Saturday Midday Peak

<b>Intersection</b>			
Int Delay, s/veh			
<b>Movement</b>	<b>SBL</b>	<b>SBT</b>	<b>SBR</b>
Vol, veh/h	0	2	2
Conflicting Peds, #/hr	0	0	1
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	50	50	50
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	4	4
<b>Major/Minor</b>	<b>Major2</b>		
Conflicting Flow All	3	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1632	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1631	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-
<b>Approach</b>	<b>SB</b>		
HCM Control Delay, s	0		
HCM LOS			
<b>Minor Lane/Major Mvmt</b>			

## **2015 APPENDIX**

- **Automatic Traffic Recorder Counts (volumes/speeds)**
- **Arrival Pattern Observations**
- **Turning Movement Counts**
- **Capacity Analysis**
- **Parking Counts**



PRECISION  
DATA  
INDUSTRIES, LLC

PRECISION DATA INDUSTRIES, LLC

Office: 508.481.3999 Fax: 508.545.1234

Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

*Traffic Counts with Precision*



Client:

Conley Associates

Engineer:

L. Grant

Site Code:

TBA

Date:

Thurs 8/13/15

PDI Job Number:

154598

City, State:

Sutton, MA

➤ **Automatic Traffic Recorder Counts (volumes/speeds)**

- **Pine Street**

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/27/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
06:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
07:00	0	12	7	0	1	0	0	0	0	0	0	0	0	20
08:00	0	9	2	0	1	0	0	0	0	0	0	0	0	12
09:00	0	23	9	0	1	0	0	0	0	0	0	0	0	33
10:00	0	15	7	0	4	0	0	0	0	0	0	0	0	26
11:00	0	17	13	0	1	0	0	0	0	0	0	0	0	31
12 PM	0	27	12	0	2	0	0	0	0	0	0	0	0	41
13:00	0	35	9	0	2	0	0	0	0	0	0	0	0	46
14:00	0	25	14	0	3	0	0	0	0	0	0	0	0	42
15:00	0	26	8	0	0	0	0	0	0	0	0	0	0	34
16:00	1	19	7	0	3	0	0	1	0	0	0	0	0	31
17:00	0	19	8	0	0	0	0	0	0	0	0	0	0	27
18:00	0	11	4	0	0	0	0	0	0	0	0	0	0	15
19:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
20:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
21:00	0	1	0	0	2	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	253	105	0	22	0	0	1	0	0	0	0	0	382
Percent	0.3%	66.2%	27.5%	0.0%	5.8%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		09:00	11:00		10:00									09:00
Vol.		23	13		4									33
PM Peak	16:00	13:00	14:00		14:00			16:00						13:00
Vol.	1	35	14		3			1						46

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/28/1														
5	0	1	0	0	1	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
06:00	0	5	3	1	1	0	0	0	0	0	0	0	0	10
07:00	0	6	2	0	0	0	0	0	1	0	0	0	0	9
08:00	0	13	6	0	1	0	0	0	0	0	0	0	0	20
09:00	0	26	15	0	2	0	0	0	0	0	0	0	0	43
10:00	0	11	6	0	3	0	0	0	0	0	0	0	0	20
11:00	0	15	6	0	1	0	0	0	0	0	0	0	0	22
12 PM	0	27	11	0	3	0	0	0	0	0	0	0	0	41
13:00	0	40	20	0	7	0	0	0	0	0	0	0	0	67
14:00	0	36	14	0	2	0	0	0	0	0	0	0	0	52
15:00	0	38	13	0	1	0	0	0	0	0	0	0	0	52
16:00	1	30	14	0	2	0	0	0	0	0	0	0	0	47
17:00	0	22	10	0	2	0	0	0	0	0	0	0	0	34
18:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
19:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
20:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	299	127	1	26	0	0	0	1	0	0	0	0	455
Percent	0.2%	65.7%	27.9%	0.2%	5.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		09:00	09:00	06:00	10:00				07:00					09:00
Vol.		26	15	1	3				1					43
PM Peak	16:00	13:00	13:00		13:00									13:00
Vol.	1	40	20		7									67

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/29/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	2	0	1	2	0	0	0	0	0	0	0	0	5
07:00	0	5	5	0	1	0	0	0	0	0	0	0	0	11
08:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11
09:00	0	15	7	0	2	0	0	0	0	0	0	0	0	24
10:00	0	12	5	0	0	0	0	0	0	0	0	0	0	17
11:00	0	16	7	0	2	0	0	0	0	0	0	0	0	25
12 PM	0	22	9	0	5	0	0	0	0	0	0	0	0	36
13:00	0	19	10	0	1	0	0	0	0	0	0	0	0	30
14:00	0	33	9	0	4	0	0	0	0	0	0	0	0	46
15:00	0	17	9	0	3	0	0	0	0	0	0	0	0	29
16:00	0	27	6	0	1	0	0	0	0	0	0	0	0	34
17:00	0	21	9	0	2	0	0	0	0	0	0	0	0	32
18:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11
19:00	0	8	4	0	0	0	0	0	0	0	0	0	0	12
20:00	0	1	3	0	0	0	0	0	0	0	0	0	0	4
21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	222	90	1	24	0	0	0	0	0	0	0	0	337
Percent	0.0%	65.9%	26.7%	0.3%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	09:00	06:00	06:00									11:00
Vol.		16	7	1	2									25
PM Peak		14:00	13:00		12:00									14:00
Vol.		33	10		5									46
Total		774	322	2	72	0	0	1	1	0	0	0	0	1174

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/27/1														
5	0	1	0	0	1	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
06:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
07:00	0	5	1	0	1	0	0	1	0	0	0	0	0	8
08:00	0	11	13	0	3	0	0	0	0	0	0	0	0	27
09:00	0	20	16	0	1	0	0	0	0	0	0	0	0	37
10:00	0	30	11	0	1	0	0	0	0	0	0	0	0	42
11:00	0	23	10	0	3	0	0	0	0	0	0	0	0	36
12 PM	2	16	14	0	2	0	0	1	0	0	0	0	0	35
13:00	0	16	9	0	2	0	0	0	0	0	0	0	0	27
14:00	0	24	9	0	1	0	0	0	0	0	0	0	0	34
15:00	0	15	9	0	0	0	0	1	0	0	0	0	0	25
16:00	0	5	11	0	2	0	0	0	0	0	0	0	0	18
17:00	0	9	8	0	2	0	0	1	0	0	0	0	0	20
18:00	0	11	4	0	2	0	0	0	0	0	0	0	0	17
19:00	0	7	2	0	2	0	0	0	0	0	0	0	0	11
20:00	0	5	4	0	0	0	0	0	0	0	0	0	0	9
21:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	209	123	0	26	0	0	4	0	0	0	0	0	364
Percent	0.5%	57.4%	33.8%	0.0%	7.1%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	09:00		08:00			07:00						10:00
Vol.		30	16		3			1						42
PM Peak	12:00	14:00	12:00		12:00			12:00						12:00
Vol.	2	24	14		2			1						35

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/28/1														
5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
06:00	0	3	0	1	0	0	0	0	1	0	0	0	0	5
07:00	0	5	6	0	3	0	0	0	0	0	0	0	0	14
08:00	0	11	9	0	2	0	0	0	0	0	0	0	0	22
09:00	0	13	14	0	1	0	0	0	0	0	0	0	0	28
10:00	2	43	29	0	2	0	0	0	0	0	0	0	0	76
11:00	0	22	15	0	2	0	0	0	0	0	0	0	0	39
12 PM	0	22	22	0	3	0	0	0	0	0	0	0	0	47
13:00	0	24	11	0	7	0	0	0	0	0	0	0	0	42
14:00	0	19	11	0	0	0	0	1	0	0	0	0	0	31
15:00	0	15	8	0	2	0	0	0	0	0	0	0	0	25
16:00	2	11	12	0	1	0	0	0	0	0	0	0	0	26
17:00	0	7	4	0	3	0	0	0	0	0	0	0	0	14
18:00	0	14	4	0	1	0	0	0	0	0	0	0	0	19
19:00	0	6	4	0	3	0	0	0	0	0	0	0	0	13
20:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
21:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
Total	4	229	155	1	34	0	0	1	1	0	0	0	0	425
Percent	0.9%	53.9%	36.5%	0.2%	8.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	10:00	10:00	06:00	07:00				06:00					10:00
Vol.	2	43	29	1	3				1					76
PM Peak	16:00	13:00	12:00		13:00			14:00						12:00
Vol.	2	24	22		7			1						47

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/29/1														
5	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	2	1	0	0	0	0	0	0	0	0	0	3
07:00	0	3	4	0	4	0	0	0	0	0	0	0	0	11
08:00	0	7	3	0	1	0	0	0	0	0	0	0	0	11
09:00	0	13	10	0	3	0	0	0	0	0	0	0	0	26
10:00	0	18	8	0	2	0	0	0	0	0	0	0	0	28
11:00	0	24	14	0	2	0	0	0	0	0	0	0	0	40
12 PM	0	24	16	0	5	0	0	0	0	0	0	0	0	45
13:00	0	21	9	0	3	0	0	0	0	0	0	0	0	33
14:00	0	20	9	0	5	0	0	0	0	0	0	0	0	34
15:00	0	15	8	0	3	0	0	0	0	0	0	0	0	26
16:00	0	6	4	0	3	0	0	0	0	0	0	0	0	13
17:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
18:00	0	5	3	0	1	0	0	0	0	0	0	0	0	9
19:00	0	3	4	0	1	0	0	0	0	0	0	0	0	8
20:00	0	4	4	0	0	0	0	0	0	0	0	0	0	8
21:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	178	105	1	35	0	0	0	0	0	0	0	0	320
Percent	0.3%	55.6%	32.8%	0.3%	10.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	11:00	11:00	06:00	07:00									11:00
Vol.	1	24	14	1	4									40
PM Peak		12:00	12:00		12:00									12:00
Vol.		24	16		5									45
Total		616	383	2	95	0	0	5	1	0	0	0	0	1109

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/27/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	18	17
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	28	27
06:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3	36	32
07:00	0	1	3	8	8	0	0	0	0	0	0	0	0	20	32	28
08:00	0	0	9	1	2	0	0	0	0	0	0	0	0	12	29	24
09:00	0	3	12	15	3	0	0	0	0	0	0	0	0	33	28	25
10:00	0	2	8	12	4	0	0	0	0	0	0	0	0	26	29	25
11:00	1	2	12	11	5	0	0	0	0	0	0	0	0	31	29	25
12 PM	2	4	15	15	5	0	0	0	0	0	0	0	0	41	28	24
13:00	2	1	15	23	6	0	0	0	0	0	0	0	0	47	28	25
14:00	0	5	13	18	6	0	0	0	0	0	0	0	0	42	28	25
15:00	0	6	17	10	1	0	0	0	0	0	0	0	0	34	26	23
16:00	1	3	9	16	1	1	0	0	0	0	0	0	0	31	28	24
17:00	1	4	11	11	1	0	0	0	0	0	0	0	0	28	27	23
18:00	0	3	5	3	4	0	0	0	0	0	0	0	0	15	31	25
19:00	0	0	4	3	0	0	0	0	0	0	0	0	0	7	27	24
20:00	0	0	1	3	1	0	0	0	0	0	0	0	0	5	30	27
21:00	0	0	0	1	2	0	0	0	0	0	0	0	0	3	32	30
22:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	18	17
Total	7	36	134	155	50	2	0	0	0	0	0	0	0	384		
%	1.8%	9.4%	34.9%	40.4%	13.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	09:00	09:00	07:00	06:00								09:00		
Vol.		3	12	15	8	1								33		
Midda y Peak	12:00	14:00	12:00	13:00	13:00									13:00		
Vol.	2	5	15	23	6									47		
PM Peak	16:00	15:00	15:00	16:00	18:00	16:00								15:00		
Vol.	1	6	17	16	4	1								34		
% ile			15th Percentile :			19 MPH										
			50th Percentile :			24 MPH										
			85th Percentile :			28 MPH										
			95th Percentile :			32 MPH										

Stats      10 MPH Pace Speed :      20-29 MPH  
                                  Number in Pace :      289  
                                  Percent in Pace :      75.3%  
                  Number of Vehicles > 25 MPH :      176  
                  Percent of Vehicles > 25 MPH :      45.8%  
                  Mean Speed(Average) :      25 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/28/																
15	0	0	0	2	0	0	0	0	0	0	0	0	0	2	28	27
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	2	2	0	0	0	0	0	0	0	0	0	4	27	25
06:00	0	3	4	3	0	0	0	0	0	0	0	0	0	10	26	22
07:00	0	1	3	3	2	0	0	0	0	0	0	0	0	9	30	25
08:00	1	3	8	5	3	0	0	0	0	0	0	0	0	20	29	23
09:00	1	1	19	18	4	0	0	0	0	0	0	0	0	43	28	25
10:00	0	2	6	8	4	0	0	0	0	0	0	0	0	20	30	26
11:00	2	1	9	9	1	0	0	0	0	0	0	0	0	22	27	23
12 PM	0	5	14	17	4	1	0	0	0	0	0	0	0	41	28	25
13:00	4	2	28	23	10	1	0	0	0	0	0	0	0	68	29	24
14:00	3	10	21	16	2	0	0	0	0	0	0	0	0	52	27	22
15:00	0	8	23	16	5	0	0	0	0	0	0	0	0	52	28	24
16:00	1	10	17	17	2	0	0	0	0	0	0	0	0	47	27	23
17:00	0	6	8	17	3	0	0	0	0	0	0	0	0	34	28	25
18:00	0	4	6	6	0	1	0	0	0	0	0	0	0	17	27	23
19:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3	22	20
20:00	0	0	1	3	2	0	0	0	0	0	0	0	0	6	31	28
21:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	32	30
22:00	0	0	1	0	1	1	0	0	0	0	0	0	0	3	36	30
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	12	57	173	166	44	4	0	0	0	0	0	0	0	456		
%	2.6%	12.5%	37.9%	36.4%	9.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	06:00	09:00	09:00	09:00									09:00		
Vol.	1	3	19	18	4									43		
Midda y Peak	13:00	14:00	13:00	13:00	13:00	12:00								13:00		
Vol.	4	10	28	23	10	1								68		
PM Peak	16:00	16:00	15:00	16:00	15:00	18:00								15:00		
Vol.	1	10	23	17	5	1								52		
% ile			15th Percentile :			18 MPH										
			50th Percentile :			23 MPH										
			85th Percentile :			28 MPH										
			95th Percentile :			31 MPH										

Stats      10 MPH Pace Speed :      20-29 MPH  
                                  Number in Pace :      339  
                                  Percent in Pace :      74.3%  
                  Number of Vehicles > 25 MPH :      181  
                  Percent of Vehicles > 25 MPH :      39.6%  
                  Mean Speed(Average) :      24 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/29/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	33	32
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
05:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2	23	22
06:00	0	1	2	2	0	0	0	0	0	0	0	0	0	5	27	23
07:00	0	1	2	6	1	1	0	0	0	0	0	0	0	11	30	27
08:00	0	1	2	6	2	0	0	0	0	0	0	0	0	11	29	26
09:00	0	2	10	8	4	0	0	0	0	0	0	0	0	24	29	25
10:00	2	2	3	7	2	1	0	0	0	0	0	0	0	17	30	24
11:00	0	1	11	12	1	0	0	0	0	0	0	0	0	25	27	25
12 PM	3	5	15	10	3	0	0	0	0	0	0	0	0	36	27	22
13:00	2	3	11	10	4	0	0	0	0	0	0	0	0	30	28	24
14:00	2	2	22	15	5	0	0	0	0	0	0	0	0	46	28	24
15:00	2	4	13	9	1	0	0	0	0	0	0	0	0	29	27	22
16:00	1	3	12	15	3	0	0	0	0	0	0	0	0	34	28	24
17:00	0	7	13	10	2	0	0	0	0	0	0	0	0	32	27	23
18:00	0	1	4	4	2	0	0	0	0	0	0	0	0	11	29	25
19:00	0	2	2	7	1	0	0	0	0	0	0	0	0	12	28	25
20:00	0	1	0	2	1	0	0	0	0	0	0	0	0	4	31	26
21:00	1	0	0	1	1	0	0	0	0	0	0	0	0	3	31	22
22:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	28	27
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
Total	13	36	126	126	34	2	0	0	0	0	0	0	0	337		
%	3.9%	10.7%	37.4%	37.4%	10.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	09:00	09:00	09:00	07:00								09:00		
Vol.		2	10	8	4	1								24		
Midda y Peak	12:00	12:00	14:00	14:00	14:00									14:00		
Vol.	3	5	22	15	5									46		
PM Peak	15:00	17:00	15:00	16:00	16:00									16:00		
Vol.	2	7	13	15	3									34		
% ile			15th Percentile :			19 MPH										
			50th Percentile :			23 MPH										
			85th Percentile :			28 MPH										
			95th Percentile :			31 MPH										

Stats  
10 MPH Pace Speed : 20-29 MPH  
Number in Pace : 252  
Percent in Pace : 74.8%  
Number of Vehicles > 25 MPH : 137  
Percent of Vehicles > 25 MPH : 40.6%  
Mean Speed(Average) : 24 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/27/																
15	0	0	0	1	1	0	0	0	0	0	0	0	0	2	32	30
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	0	0	1	0	0	0	0	0	0	0	0	2	32	20
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	32	27
07:00	0	0	2	2	4	0	0	0	0	0	0	0	0	8	32	28
08:00	0	1	1	15	8	2	0	0	0	0	0	0	0	27	32	29
09:00	0	0	5	21	8	3	0	0	0	0	0	0	0	37	32	28
10:00	0	2	7	19	11	2	1	0	0	0	0	0	0	42	32	28
11:00	0	4	12	10	10	0	0	0	0	0	0	0	0	36	31	26
12 PM	2	3	7	14	8	1	0	0	0	0	0	0	0	35	31	25
13:00	0	0	5	19	3	0	0	0	0	0	0	0	0	27	28	27
14:00	0	2	6	20	5	1	0	0	0	0	0	0	0	34	29	27
15:00	0	2	5	10	8	0	0	0	0	0	0	0	0	25	31	27
16:00	1	1	5	9	2	0	0	0	0	0	0	0	0	18	28	25
17:00	0	3	5	7	4	1	0	0	0	0	0	0	0	20	31	26
18:00	0	1	4	6	4	2	0	0	0	0	0	0	0	17	33	28
19:00	1	0	1	7	2	0	0	0	0	0	0	0	0	11	29	26
20:00	0	0	4	4	1	0	0	0	0	0	0	0	0	9	28	25
21:00	0	0	2	3	2	1	0	0	0	0	0	0	0	8	33	28
22:00	0	0	0	3	1	0	0	0	0	0	0	0	0	4	31	28
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	5	19	72	170	84	13	1	0	0	0	0	0	0	364		
%	1.4%	5.2%	19.8%	46.7%	23.1%	3.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	08:00	09:00	09:00	08:00	09:00								09:00		
Vol.	1	1	5	21	8	3								37		
Midda y Peak	12:00	11:00	11:00	14:00	11:00	12:00								11:00		
Vol.	2	4	12	20	10	1								36		
PM Peak	16:00	17:00	15:00	15:00	15:00	18:00								15:00		
Vol.	1	3	5	10	8	2								25		
% ile			15th Percentile :			21 MPH										
			50th Percentile :			26 MPH										
			85th Percentile :			31 MPH										
			95th Percentile :			33 MPH										

Stats      10 MPH Pace Speed :      25-34 MPH  
                                  Number in Pace :      254  
                                  Percent in Pace :      69.8%  
                  Number of Vehicles > 25 MPH :      234  
                  Percent of Vehicles > 25 MPH :      64.3%  
                  Mean Speed(Average) :      27 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/28/																
15	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	33	32
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	32	30
06:00	1	1	2	1	0	0	0	0	0	0	0	0	0	5	25	19
07:00	0	0	5	5	4	0	0	0	0	0	0	0	0	14	31	27
08:00	0	0	2	11	9	0	0	0	0	0	0	0	0	22	32	29
09:00	0	1	8	9	8	2	0	0	0	0	0	0	0	28	32	27
10:00	2	0	12	42	16	4	0	0	0	0	0	0	0	76	31	27
11:00	0	2	8	19	9	1	0	0	0	0	0	0	0	39	31	27
12 PM	1	4	12	22	7	1	0	0	0	0	0	0	0	47	29	25
13:00	2	4	8	18	8	2	0	0	0	0	0	0	0	42	31	26
14:00	0	1	11	12	6	1	0	0	0	0	0	0	0	31	30	26
15:00	0	1	4	16	2	2	0	0	0	0	0	0	0	25	29	27
16:00	2	0	9	11	4	0	0	0	0	0	0	0	0	26	29	25
17:00	0	0	5	5	4	0	0	0	0	0	0	0	0	14	31	27
18:00	0	2	3	10	4	0	0	0	0	0	0	0	0	19	30	26
19:00	0	0	4	6	1	2	0	0	0	0	0	0	0	13	34	27
20:00	0	2	1	1	2	0	0	0	0	0	0	0	0	6	31	24
21:00	0	0	2	4	1	0	1	0	0	0	0	0	0	8	32	28
22:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3	36	32
23:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3	31	27
Total	8	18	97	196	89	16	1	0	0	0	0	0	0	425		
%	1.9%	4.2%	22.8%	46.1%	20.9%	3.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	06:00	09:00	08:00	08:00	09:00								09:00		
Vol.	1	1	8	11	9	2								28		
Midda y Peak	13:00	12:00	12:00	12:00	11:00	13:00								12:00		
Vol.	2	4	12	22	9	2								47		
PM Peak	16:00	18:00	16:00	15:00	16:00	15:00	21:00							16:00		
Vol.	2	2	9	16	4	2	1							26		
% ile				15th Percentile :		20 MPH										
				50th Percentile :		26 MPH										
				85th Percentile :		31 MPH										
				95th Percentile :		33 MPH										

Stats      10 MPH Pace Speed :      20-29 MPH  
                  Number in Pace :      293  
                  Percent in Pace :      68.9%  
          Number of Vehicles > 25 MPH :      263  
          Percent of Vehicles > 25 MPH :      61.8%  
          Mean Speed(Average) :      27 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/29/																
15	0	0	0	0	1	1	0	0	0	0	0	0	0	2	37	35
01:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	28	27
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1	11	8
06:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3	27	25
07:00	0	1	2	7	0	1	0	0	0	0	0	0	0	11	28	26
08:00	0	0	1	4	5	1	0	0	0	0	0	0	0	11	33	30
09:00	0	0	5	11	7	3	0	0	0	0	0	0	0	26	33	29
10:00	0	3	4	14	6	1	0	0	0	0	0	0	0	28	31	27
11:00	0	3	14	15	8	0	0	0	0	0	0	0	0	40	30	26
12 PM	3	6	10	21	5	0	0	0	0	0	0	0	0	45	28	24
13:00	0	3	6	20	3	1	0	0	0	0	0	0	0	33	28	26
14:00	0	3	8	19	4	0	0	0	0	0	0	0	0	34	28	26
15:00	1	2	9	10	4	0	0	0	0	0	0	0	0	26	29	25
16:00	0	1	4	5	3	0	0	0	0	0	0	0	0	13	30	26
17:00	0	0	3	6	1	0	0	0	0	0	0	0	0	10	28	26
18:00	0	0	4	3	2	0	0	0	0	0	0	0	0	9	30	26
19:00	0	2	2	2	2	0	0	0	0	0	0	0	0	8	31	24
20:00	0	0	0	5	2	1	0	0	0	0	0	0	0	8	33	30
21:00	0	1	2	3	1	0	0	0	0	0	0	0	0	7	28	25
22:00	0	0	0	1	2	0	0	0	0	0	0	0	0	3	32	30
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	5	25	75	150	56	9	0	0	0	0	0	0	0	320		
%	1.6%	7.8%	23.4%	46.9%	17.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	07:00	09:00	09:00	09:00	09:00								09:00		
Vol.	1	1	5	11	7	3								26		
Midda y Peak	12:00	12:00	11:00	12:00	11:00	13:00								12:00		
Vol.	3	6	14	21	8	1								45		
PM Peak	15:00	15:00	15:00	15:00	15:00	20:00								15:00		
Vol.	1	2	9	10	4	1								26		
% ile				15th Percentile :			20 MPH									
				50th Percentile :			25 MPH									
				85th Percentile :			30 MPH									
				95th Percentile :			33 MPH									

Stats

10 MPH Pace Speed :	20-29 MPH
Number in Pace :	225
Percent in Pace :	70.3%
Number of Vehicles > 25 MPH :	185
Percent of Vehicles > 25 MPH :	57.8%
Mean Speed(Average) :	26 MPH

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	NB				SB				Combin ed		27-Aug- 15 Thu	
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00	0		9		0		6		0		15	
12:15	0		9		0		12		0		21	
12:30	0		7		1		9		1		16	
12:45	0	0	16	41	1	2	8	35	1	2	24	76
01:00	0		19		0		3		0		22	
01:15	1		8		0		13		1		21	
01:30	0		12		0		6		0		18	
01:45	0	1	8	47	0	0	5	27	0	1	13	74
02:00	0		7		0		7		0		14	
02:15	0		12		0		11		0		23	
02:30	0		13		0		10		0		23	
02:45	0	0	10	42	0	0	6	34	0	0	16	76
03:00	0		9		0		7		0		16	
03:15	0		9		0		7		0		16	
03:30	0		10		0		6		0		16	
03:45	1	1	6	34	0	0	5	25	1	1	11	59
04:00	0		10		0		5		0		15	
04:15	0		8		0		3		0		11	
04:30	0		7		0		6		0		13	
04:45	0	0	6	31	0	0	4	18	0	0	10	49
05:00	1		10		1		7		2		17	
05:15	0		8		0		6		0		14	
05:30	0		4		1		5		1		9	
05:45	1	2	6	28	0	2	2	20	1	4	8	48
06:00	1		5		0		4		1		9	
06:15	1		1		0		5		1		6	
06:30	1		2		1		3		2		5	
06:45	0	3	7	15	1	2	5	17	1	5	12	32
07:00	5		1		2		2		7		3	
07:15	3		5		0		2		3		7	
07:30	5		0		3		1		8		1	
07:45	7	20	1	7	3	8	6	11	10	28	7	18
08:00	0		0		7		3		7		3	
08:15	4		3		6		2		10		5	
08:30	4		1		2		2		6		3	
08:45	4	12	1	5	12	27	2	9	16	39	3	14
09:00	7		1		8		4		15		5	
09:15	8		2		10		2		18		4	
09:30	11		0		6		1		17		1	
09:45	7	33	0	3	13	37	1	8	20	70	1	11
10:00	8		1		8		3		16		4	
10:15	6		0		11		1		17		1	
10:30	4		0		11		0		15		0	
10:45	8	26	0	1	12	42	0	4	20	68	0	5
11:00	9		0		10		0		19		0	
11:15	7		1		13		0		20		1	
11:30	8		0		8		0		16		0	
11:45	7	31	0	1	5	36	0	0	12	67	0	1
Total	129		255		156		208		285		463	
Percent	45.3%		55.1%		54.7%		44.9%					
Day Total			384				364				748	
Peak	09:15	-	00:45	-	10:30	-	12:00	-	10:45	-	00:45	-
Vol.	34	-	55	-	46	-	35	-	75	-	85	-
P.H.F.	0.773		0.724		0.885		0.729		0.938		0.885	

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	NB		SB		Combined		28-Aug-15 Fri	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	0	7	0	9	0	16		
12:15	0	14	0	11	0	25		
12:30	0	6	0	8	0	14		
12:45	2	14	1	19	3	33	88	
01:00	0	19	1	9	1	28		
01:15	0	13	0	13	0	26		
01:30	0	19	0	10	0	29		
01:45	0	17	0	10	0	27	110	
02:00	0	19	0	11	0	30		
02:15	0	8	0	5	0	13		
02:30	0	14	0	6	0	20		
02:45	0	11	0	9	0	20	83	
03:00	0	14	0	9	0	23		
03:15	1	12	0	6	1	18		
03:30	0	14	0	2	0	16		
03:45	0	12	0	8	0	20	77	
04:00	0	19	0	7	0	26		
04:15	0	10	0	6	0	16		
04:30	0	9	0	6	0	15		
04:45	0	9	0	7	0	16	73	
05:00	0	14	0	6	0	20		
05:15	0	8	1	2	1	10		
05:30	2	6	0	3	2	9		
05:45	2	6	1	3	3	9	48	
06:00	2	6	0	6	2	12		
06:15	1	7	1	6	2	13		
06:30	2	2	2	5	4	7		
06:45	5	2	2	2	7	4	36	
07:00	3	0	4	7	7	7		
07:15	0	2	0	1	0	3		
07:30	2	0	3	3	5	3		
07:45	4	1	7	2	11	3	16	
08:00	4	0	4	4	8	4		
08:15	5	1	2	2	7	3		
08:30	5	5	7	0	12	5		
08:45	6	0	9	0	15	0	12	
09:00	11	1	8	2	19	3		
09:15	13	1	7	1	20	2		
09:30	5	0	6	3	11	3		
09:45	14	0	7	2	21	2	10	
10:00	5	1	21	2	26	3		
10:15	5	0	13	0	18	0		
10:30	4	1	18	1	22	2		
10:45	6	1	24	0	30	1	6	
11:00	7	0	14	0	21	0		
11:15	7	0	9	2	16	2		
11:30	2	0	9	1	11	1		
11:45	6	0	7	0	13	0	3	
Total	131	325	188	237	319	562		
Percent	41.1%	57.8%	58.9%	42.2%				
Day Total		456		425		881		
Peak Vol.	09:00 43	01:00 68	10:00 76	00:45 51	10:00 96	00:45 116		
P.H.F.	0.768	0.895	0.792	0.671	0.800	0.879		

Pine Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 A Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	NB				SB				Combin ed		29-Aug- 15 Sat	
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00	0		10		0		12		0		22	
12:15	0		7		0		16		0		23	
12:30	0		7		2		4		2		11	
12:45	0	0	12	36	0	2	13	45	0	2	25	81
01:00	0		2		0		8		0		10	
01:15	0		12		0		9		0		21	
01:30	1		7		2		8		3		15	
01:45	0	1	9	30	0	2	8	33	0	3	17	63
02:00	0		9		0		8		0		17	
02:15	0		21		0		12		0		33	
02:30	0		8		0		5		0		13	
02:45	0	0	8	46	0	0	9	34	0	0	17	80
03:00	0		8		0		10		0		18	
03:15	0		6		0		5		0		11	
03:30	0		9		0		5		0		14	
03:45	0	0	6	29	0	0	6	26	0	0	12	55
04:00	0		8		0		4		0		12	
04:15	0		7		0		3		0		10	
04:30	0		6		0		4		0		10	
04:45	1	1	13	34	0	0	2	13	1	1	15	47
05:00	0		5		0		3		0		8	
05:15	0		17		1		5		1		22	
05:30	1		6		0		1		1		7	
05:45	1	2	4	32	0	1	1	10	1	3	5	42
06:00	0		7		1		0		1		7	
06:15	3		2		0		3		3		5	
06:30	1		2		0		2		1		4	
06:45	1	5	0	11	2	3	4	9	3	8	4	20
07:00	2		0		2		0		4		0	
07:15	2		4		1		5		3		9	
07:30	4		6		4		2		8		8	
07:45	3	11	2	12	4	11	1	8	7	22	3	20
08:00	2		1		2		3		4		4	
08:15	3		1		4		1		7		2	
08:30	1		1		1		3		2		4	
08:45	5	11	1	4	4	11	1	8	9	22	2	12
09:00	6		1		8		0		14		1	
09:15	8		1		4		3		12		4	
09:30	5		0		4		3		9		3	
09:45	5	24	1	3	10	26	1	7	15	50	2	10
10:00	2		0		9		2		11		2	
10:15	4		1		5		0		9		1	
10:30	6		0		4		1		10		1	
10:45	5	17	1	2	10	28	0	3	15	45	1	5
11:00	6		1		12		0		18		1	
11:15	7		0		10		0		17		0	
11:30	6		0		9		0		15		0	
11:45	6	25	0	1	9	40	0	0	15	65	0	1
Total	97		240		124		196		221		436	
Percent	43.9%		55.0%		56.1%		45.0%					
Day Total			337				320				657	
Peak	11:00	-	01:45	-	10:45	-	12:00	-	10:45	-	01:30	-
Vol.	25	-	47	-	41	-	45	-	65	-	82	-
P.H.F.	0.781		0.560		0.854		0.703		0.903		0.621	

- **Grove Street**

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/27/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	2	0	0	0	0	0	1	0	0	0	0	0	3
07:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
08:00	0	17	4	0	0	0	0	0	0	0	0	0	0	21
09:00	0	31	10	0	0	0	0	0	0	0	0	0	0	41
10:00	0	29	6	0	0	0	0	0	0	0	0	0	0	35
11:00	1	31	9	0	0	0	0	0	0	0	0	0	0	41
12 PM	0	18	3	0	2	0	0	0	0	0	0	0	0	23
13:00	0	22	3	0	1	0	0	0	0	0	0	0	0	26
14:00	0	27	6	0	0	0	0	0	0	0	0	0	0	33
15:00	0	32	1	0	0	0	0	0	0	0	0	0	0	33
16:00	0	7	2	0	1	0	0	0	0	0	0	0	0	10
17:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
18:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
20:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	230	48	0	4	0	0	1	0	0	0	0	0	284
Percent	0.4%	81.0%	16.9%	0.0%	1.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	09:00	09:00					06:00						09:00
Vol.	1	31	10					1						41
PM Peak		15:00	14:00		12:00									14:00
Vol.		32	6		2									33

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/28/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
07:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
08:00	0	16	9	0	0	0	0	0	0	0	0	0	0	25
09:00	0	43	9	0	3	0	0	0	0	0	0	0	0	55
10:00	1	73	7	0	2	0	0	0	0	0	0	0	0	83
11:00	0	57	8	0	3	0	0	0	0	0	0	0	0	68
12 PM	1	29	8	0	1	0	0	0	0	0	0	0	0	39
13:00	2	26	6	0	2	0	0	0	0	0	0	0	0	36
14:00	0	18	4	0	1	0	0	0	0	0	0	0	0	23
15:00	2	26	2	1	0	1	0	0	0	0	0	0	0	32
16:00	0	7	3	0	2	0	0	0	0	0	0	0	0	12
17:00	0	5	3	0	1	0	0	0	0	0	0	0	0	9
18:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
19:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
20:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	320	62	1	16	1	0	0	0	0	0	0	0	406
Percent	1.5%	78.8%	15.3%	0.2%	3.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	10:00	08:00		09:00									10:00
Vol.	1	73	9		3									83
PM Peak	13:00	12:00	12:00	15:00	13:00	15:00								12:00
Vol.	2	29	8	1	2	1								39

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/29/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
08:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
09:00	0	14	4	0	2	0	0	0	0	0	0	0	0	20
10:00	2	27	5	0	1	0	0	0	0	0	0	0	0	35
11:00	1	38	9	0	1	0	0	0	0	0	0	0	0	49
12 PM	0	23	4	0	3	0	0	0	0	0	0	0	0	30
13:00	1	27	6	0	1	0	0	0	0	0	0	0	0	35
14:00	2	32	2	0	2	0	0	0	0	0	0	0	0	38
15:00	0	24	1	0	2	0	0	0	0	0	0	0	0	27
16:00	1	7	5	0	2	0	0	0	0	0	0	0	0	15
17:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
18:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
19:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	7	230	45	0	17	0	0	0	0	0	0	0	0	299
Percent	2.3%	76.9%	15.1%	0.0%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00		09:00									11:00
Vol.	2	38	9		2									49
PM Peak	14:00	14:00	13:00		12:00									14:00
Vol.	2	32	6		3									38
Total		780	155	1	37	1	0	1	0	0	0	0	0	989

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/27/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	1	1	0	0	0	0	1	0	0	0	0	0	3
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:00	0	4	4	0	0	0	0	0	0	0	0	0	0	8
09:00	0	15	7	0	0	0	0	0	0	0	0	0	0	22
10:00	0	7	4	0	1	0	0	0	0	0	0	0	0	12
11:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
12 PM	0	19	5	0	1	0	0	0	0	0	0	0	0	25
13:00	0	27	5	0	0	0	0	0	0	0	0	0	0	32
14:00	0	15	6	0	0	0	0	0	0	0	0	0	0	21
15:00	0	32	4	0	0	0	0	0	0	0	0	0	0	36
16:00	0	34	2	0	1	0	0	0	0	0	0	0	0	37
17:00	1	31	6	0	0	0	0	0	0	0	0	0	0	38
18:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14
19:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
20:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	220	50	0	3	0	0	1	0	0	0	0	0	275
Percent	0.4%	80.0%	18.2%	0.0%	1.1%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		09:00	09:00		10:00			06:00						09:00
Vol.		15	7		1			1						22
PM Peak	17:00	16:00	14:00		12:00									17:00
Vol.	1	34	6		1									38

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/28/1														
5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
09:00	0	13	5	0	1	0	0	0	0	0	0	0	0	19
10:00	0	15	4	1	3	0	0	0	0	0	0	0	0	23
11:00	0	12	5	0	1	0	0	0	0	0	0	0	0	18
12 PM	1	41	4	0	1	0	0	0	0	0	0	0	0	47
13:00	0	42	8	0	2	1	0	0	0	0	0	0	0	53
14:00	1	36	6	0	2	0	0	0	0	0	0	0	0	45
15:00	0	48	8	0	1	1	0	0	0	0	0	0	0	58
16:00	0	36	8	0	2	0	0	0	0	0	0	0	0	46
17:00	0	30	7	1	3	0	0	0	0	0	0	0	0	41
18:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
19:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
20:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	295	62	2	18	2	0	0	0	0	0	0	0	381
Percent	0.5%	77.4%	16.3%	0.5%	4.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		10:00	09:00	10:00	10:00									10:00
Vol.		15	5	1	3									23
PM Peak	12:00	15:00	13:00	17:00	17:00	13:00								15:00
Vol.	1	48	8	1	3	1								58

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Class  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
08/29/1														
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
07:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
08:00	0	5	1	0	1	0	0	0	0	0	0	0	0	7
09:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
10:00	0	10	1	0	2	0	0	0	0	0	0	0	0	13
11:00	0	11	5	0	1	0	0	0	0	0	0	0	0	17
12 PM	0	22	8	0	1	0	0	0	0	0	0	0	0	31
13:00	0	28	6	0	1	0	0	0	0	0	0	0	0	35
14:00	0	32	2	0	1	0	0	0	0	0	0	0	0	35
15:00	0	30	6	0	2	0	0	0	0	0	0	0	0	38
16:00	1	24	3	0	1	0	0	0	0	0	0	0	0	29
17:00	0	45	7	0	0	0	0	0	0	0	0	0	0	52
18:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
19:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	231	45	0	11	0	0	0	0	0	0	0	0	288
Percent	0.3%	80.2%	15.6%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		11:00	11:00		10:00									11:00
Vol.		11	5		2									17
PM Peak	16:00	17:00	12:00		15:00									17:00
Vol.	1	45	8		2	2	0	1	0	0	0	0	0	52
Total		746	157	2	32	2	0	1	0	0	0	0	0	944

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/27/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3	31	27
07:00	0	0	1	1	1	0	0	0	0	0	0	0	0	3	31	27
08:00	0	0	2	12	4	3	0	0	0	0	0	0	0	21	33	29
09:00	0	1	15	19	6	0	0	0	0	0	0	0	0	41	28	26
10:00	0	2	7	16	10	0	0	0	0	0	0	0	0	35	31	27
11:00	0	0	13	19	8	0	1	0	0	0	0	0	0	41	30	27
12 PM	0	2	5	11	5	0	0	0	0	0	0	0	0	23	30	26
13:00	1	3	6	10	6	0	0	0	0	0	0	0	0	26	30	25
14:00	0	8	7	14	4	0	0	0	0	0	0	0	0	33	28	24
15:00	1	3	13	8	7	1	0	0	0	0	0	0	0	33	31	25
16:00	0	0	2	4	3	1	0	0	0	0	0	0	0	10	33	28
17:00	0	0	3	1	1	0	0	0	0	0	0	0	0	5	30	25
18:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3	27	25
19:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2	17	12
20:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2	27	22
21:00	0	0	0	1	0	0	1	0	0	0	0	0	0	2	42	35
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	3	21	77	120	56	5	2	0	0	0	0	0	0	284		
%	1.1%	7.4%	27.1%	42.3%	19.7%	1.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	09:00	09:00	09:00	08:00								09:00		
Vol.		1	15	19	6	3								41		
Midda y Peak	13:00	14:00	11:00	11:00	11:00		11:00							11:00		
Vol.	1	8	13	19	8		1							41		
PM Peak	15:00	15:00	15:00	15:00	15:00	15:00	21:00							15:00		
Vol.	1	3	13	8	7	1	1							33		
% ile			15th Percentile :			20 MPH										
			50th Percentile :			25 MPH										
			85th Percentile :			30 MPH										
			95th Percentile :			33 MPH										

Stats

10 MPH Pace Speed :	20-29 MPH
Number in Pace :	197
Percent in Pace :	69.4%
Number of Vehicles > 25 MPH :	159
Percent of Vehicles > 25 MPH :	56.0%
Mean Speed(Average) :	26 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/28/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	32	27
07:00	0	0	0	2	0	1	1	0	0	0	0	0	0	4	41	33
08:00	0	0	6	15	4	0	0	0	0	0	0	0	0	25	29	27
09:00	0	5	16	26	7	1	0	0	0	0	0	0	0	55	28	25
10:00	3	5	24	30	20	1	0	0	0	0	0	0	0	83	31	26
11:00	1	7	13	33	13	1	0	0	0	0	0	0	0	68	30	26
12 PM	1	6	11	17	4	0	0	0	0	0	0	0	0	39	28	24
13:00	2	2	16	11	4	0	1	0	0	0	0	0	0	36	28	24
14:00	1	3	5	10	4	0	0	0	0	0	0	0	0	23	29	25
15:00	0	3	7	10	10	2	0	0	0	0	0	0	0	32	32	27
16:00	1	2	3	4	2	0	0	0	0	0	0	0	0	12	29	23
17:00	2	1	1	3	2	0	0	0	0	0	0	0	0	9	30	22
18:00	2	1	2	1	1	0	1	0	0	0	0	0	0	8	32	22
19:00	0	3	0	2	0	0	0	0	0	0	0	0	0	5	27	21
20:00	0	0	2	2	0	0	0	0	0	0	0	0	0	4	27	25
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	13	38	107	167	72	6	3	0	0	0	0	0	0	406		
%	3.2%	9.4%	26.4%	41.1%	17.7%	1.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	09:00	09:00	09:00	07:00	07:00							09:00		
Vol.		5	16	26	7	1	1							55		
Midda y Peak	13:00	11:00	13:00	11:00	11:00	11:00	13:00							11:00		
Vol.	2	7	16	33	13	1	1							68		
PM Peak	17:00	15:00	15:00	15:00	15:00	15:00	18:00							15:00		
Vol.	2	3	7	10	10	2	1							32		
% ile			15th Percentile :			19 MPH										
			50th Percentile :			25 MPH										
			85th Percentile :			30 MPH										
			95th Percentile :			33 MPH										

Stats

10 MPH Pace Speed :	20-29 MPH
Number in Pace :	274
Percent in Pace :	67.5%
Number of Vehicles > 25 MPH :	215
Percent of Vehicles > 25 MPH :	52.9%
Mean Speed(Average) :	25 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th % ile	Ave Speed
08/29/																												
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	27	25
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
07:00	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	26	21
08:00	0	0	1	7	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	32	29
09:00	1	0	4	7	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	32	27
10:00	1	5	5	12	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	32	26
11:00	0	4	14	21	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	30	26
12 PM	1	3	13	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	28	24
13:00	0	3	12	12	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	30	26
14:00	1	5	12	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	29	25
15:00	0	3	10	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	30	25
16:00	2	4	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	26	20
17:00	0	4	2	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	28	24
18:00	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	26	21
19:00	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	34	30
20:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	22
21:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	22
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	33	32
23:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	27	25
Total	6	37	86	106	57	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	299		
%	2.0%	12.4%	28.8%	35.5%	19.1%	2.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	07:00	09:00	08:00	09:00	09:00	08:00																			09:00		
Vol.	1	2	4	7	7	1	1																			20		
Midda y Peak	12:00	14:00	11:00	11:00	11:00	11:00																				11:00		
Vol.	1	5	14	21	9	1																				49		
PM Peak	16:00	16:00	15:00	15:00	15:00	15:00																				15:00		
Vol.	2	4	10	8	5	1																				27		
% ile				15th Percentile :				19 MPH																				
				50th Percentile :				24 MPH																				
				85th Percentile :				30 MPH																				
				95th Percentile :				33 MPH																				

Stats  
10 MPH Pace Speed : 20-29 MPH  
Number in Pace : 192  
Percent in Pace : 64.2%  
Number of Vehicles > 25 MPH : 149  
Percent of Vehicles > 25 MPH : 49.8%  
Mean Speed(Average) : 25 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/27/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
06:00	0	1	0	2	0	0	0	0	0	0	0	0	0	3	27	24
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	28	27
08:00	0	0	3	4	1	0	0	0	0	0	0	0	0	8	28	26
09:00	2	5	9	4	2	0	0	0	0	0	0	0	0	22	27	21
10:00	0	0	2	9	1	0	0	0	0	0	0	0	0	12	28	27
11:00	0	0	5	8	3	0	0	0	0	0	0	0	0	16	30	26
12 PM	1	4	8	9	3	0	0	0	0	0	0	0	0	25	28	24
13:00	1	4	11	15	1	0	0	0	0	0	0	0	0	32	27	24
14:00	0	4	6	9	2	0	0	0	0	0	0	0	0	21	28	24
15:00	2	4	18	9	3	0	0	0	0	0	0	0	0	36	27	23
16:00	1	3	14	16	0	3	0	0	0	0	0	0	0	37	28	25
17:00	2	3	21	11	0	1	0	0	0	0	0	0	0	38	26	23
18:00	1	1	3	4	3	1	0	1	0	0	0	0	0	14	33	27
19:00	0	1	2	3	0	0	0	0	0	0	0	0	0	6	27	24
20:00	0	0	1	0	0	1	0	0	0	0	0	0	0	2	37	30
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	58	57
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
Total	10	30	103	105	19	6	0	1	0	1	0	0	0	275		
%	3.6%	10.9%	37.5%	38.2%	6.9%	2.2%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%			
AM Peak	09:00	09:00	09:00	08:00	09:00									09:00		
Vol.	2	5	9	4	2									22		
Midda y Peak	12:00	12:00	13:00	13:00	11:00									13:00		
Vol.	1	4	11	15	3									32		
PM Peak	15:00	15:00	17:00	16:00	15:00	16:00		18:00		22:00				17:00		
Vol.	2	4	21	16	3	3		1		1				38		
% ile			15th Percentile :			19 MPH										
			50th Percentile :			23 MPH										
			85th Percentile :			28 MPH										
			95th Percentile :			32 MPH										

Stats      10 MPH Pace Speed :      20-29 MPH  
                                  Number in Pace :      208  
                                  Percent in Pace :      75.6%  
                  Number of Vehicles > 25 MPH :      111  
                  Percent of Vehicles > 25 MPH :      40.4%  
                  Mean Speed(Average) :      24 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	14	15	19	20	24	25	29	30	34	35	39	40	44	45	49	50	54	55	59	60	64	65	69	70	9999	Total	85th % ile	Ave Speed
08/28/																												
15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	27
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	27
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	27
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	22
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	22
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	27
08:00	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	26	23
09:00	0	0	12	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	27	24
10:00	3	5	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	27	21
11:00	0	6	8	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	27	22
12 PM	0	9	21	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	27	23
13:00	1	15	23	10	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	27	22
14:00	2	7	21	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	27	23
15:00	3	3	29	18	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	27	23
16:00	2	7	21	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	27	22
17:00	1	3	15	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	28	24
18:00	0	1	4	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	33	26
19:00	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	26	20
20:00	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	27	25
21:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	23	22
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	27
Total	12	59	168	117	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	381		
%	3.1%	15.5%	44.1%	30.7%	5.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak			09:00	09:00	09:00																					09:00		
Vol.			12	6	1																					19		
Midda y Peak	14:00	13:00	13:00	12:00	13:00	13:00																				13:00		
Vol.	2	15	23	15	3	1																				53		
PM Peak	15:00	16:00	15:00	15:00	15:00	15:00																				15:00		
Vol.	3	7	29	18	4	1																				58		
% ile				15th Percentile :								17 MPH																
				50th Percentile :								22 MPH																
				85th Percentile :								27 MPH																
				95th Percentile :								30 MPH																

Stats  
10 MPH Pace Speed : 20-29 MPH  
Number in Pace : 285  
Percent in Pace : 74.8%  
Number of Vehicles > 25 MPH : 119  
Percent of Vehicles > 25 MPH : 31.1%  
Mean Speed(Average) : 23 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Speed  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	1 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 9999	Total	85th % ile	Ave Speed
08/29/																
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
07:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2	27	25
08:00	0	0	3	3	0	1	0	0	0	0	0	0	0	7	28	26
09:00	0	1	4	2	1	0	0	0	0	0	0	0	0	8	28	24
10:00	0	3	4	4	1	1	0	0	0	0	0	0	0	13	29	24
11:00	1	2	10	3	1	0	0	0	0	0	0	0	0	17	26	22
12 PM	2	8	13	7	1	0	0	0	0	0	0	0	0	31	26	21
13:00	3	8	15	6	3	0	0	0	0	0	0	0	0	35	27	21
14:00	1	8	8	13	5	0	0	0	0	0	0	0	0	35	28	24
15:00	0	4	18	12	4	0	0	0	0	0	0	0	0	38	28	24
16:00	5	7	11	5	1	0	0	0	0	0	0	0	0	29	25	19
17:00	3	10	19	14	6	0	0	0	0	0	0	0	0	52	28	23
18:00	0	0	6	2	1	0	0	0	0	0	0	0	0	9	28	24
19:00	0	1	1	4	2	0	0	0	0	0	0	0	0	8	31	26
20:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2	22	20
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	23	22
Total	15	53	116	76	26	2	0	0	0	0	0	0	0	288		
%	5.2%	18.4%	40.3%	26.4%	9.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		09:00	09:00	08:00	09:00	08:00								09:00		
Vol.		1	4	3	1	1								8		
Midda y Peak	13:00	12:00	13:00	14:00	14:00									13:00		
Vol.	3	8	15	13	5									35		
PM Peak	16:00	17:00	17:00	17:00	17:00									17:00		
Vol.	5	10	19	14	6									52		
% ile			15th Percentile :			16 MPH										
			50th Percentile :			22 MPH										
			85th Percentile :			28 MPH										
			95th Percentile :			31 MPH										

Stats  
10 MPH Pace Speed : 20-29 MPH  
Number in Pace : 192  
Percent in Pace : 66.7%  
Number of Vehicles > 25 MPH : 89  
Percent of Vehicles > 25 MPH : 30.8%  
Mean Speed(Average) : 23 MPH

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	SB		NB		Combined		27-Aug-15 Thu
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	0	8	0	1	0	9	
12:15	0	6	0	6	0	12	
12:30	0	5	0	7	0	12	
12:45	0	4	0	11	0	15	48
01:00	0	14	0	6	0	20	
01:15	0	4	0	15	0	19	
01:30	0	7	0	7	0	14	
01:45	0	1	0	4	0	5	58
02:00	0	4	0	5	0	9	
02:15	0	15	0	4	0	19	
02:30	0	7	0	8	0	15	
02:45	0	7	0	4	0	11	54
03:00	1	10	0	6	1	16	
03:15	0	8	0	8	0	16	
03:30	0	6	0	14	0	20	
03:45	0	9	0	8	0	17	69
04:00	0	2	0	10	0	12	
04:15	0	4	0	5	0	9	
04:30	0	3	0	11	0	14	
04:45	0	1	0	11	0	12	47
05:00	0	4	1	12	1	16	
05:15	0	0	0	15	0	15	
05:30	0	1	0	9	0	10	
05:45	0	0	0	2	0	2	43
06:00	1	0	0	5	1	5	
06:15	1	1	1	2	2	3	
06:30	0	1	0	2	0	3	
06:45	1	1	2	5	3	6	17
07:00	0	1	0	1	0	2	
07:15	0	0	0	3	0	3	
07:30	2	1	0	2	2	3	
07:45	1	0	1	0	2	0	8
08:00	2	0	1	0	3	0	
08:15	4	0	2	1	6	1	
08:30	8	0	3	1	11	1	
08:45	7	2	2	8	9	2	4
09:00	21	0	5	0	26	0	
09:15	7	0	7	0	14	0	
09:30	4	1	5	0	9	1	
09:45	9	1	5	22	14	1	2
10:00	6	0	3	0	9	0	
10:15	13	0	4	0	17	0	
10:30	7	0	2	1	9	1	
10:45	9	0	3	12	12	0	1
11:00	10	0	4	0	14	0	
11:15	8	0	3	0	11	0	
11:30	13	0	4	0	17	0	
11:45	10	0	5	16	15	0	0
Total	145	139	63	212	208	351	
Percent	69.7%	39.6%	30.3%	60.4%			
Day Total	284		275		559		
Peak	08:30	-	02:15	-	09:00	-	03:00
Vol.	43	-	39	-	22	-	69
P.H.F.	0.512	-	0.650	-	0.786	-	0.863

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	SB		NB		Combined		28-Aug-15 Fri
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	0	14	0	6	0	20	
12:15	0	8	0	13	0	21	
12:30	0	9	0	10	0	19	
12:45	0	8	1	18	1	26	86
01:00	0	12	0	18	0	30	
01:15	1	9	0	18	1	27	
01:30	0	8	0	11	0	19	
01:45	0	7	0	6	0	13	89
02:00	0	6	1	7	1	13	
02:15	0	7	0	15	0	22	
02:30	0	2	0	14	0	16	
02:45	0	8	0	9	0	17	68
03:00	0	5	0	15	0	20	
03:15	0	9	0	12	0	21	
03:30	0	10	0	18	0	28	
03:45	0	8	0	13	0	21	90
04:00	0	7	0	12	0	19	
04:15	0	3	0	18	0	21	
04:30	0	1	0	6	0	7	
04:45	0	1	1	10	1	11	58
05:00	0	1	0	16	0	17	
05:15	0	5	0	10	0	15	
05:30	0	2	1	9	1	11	
05:45	0	1	0	6	0	7	50
06:00	0	2	0	3	0	5	
06:15	0	3	0	4	0	7	
06:30	0	1	1	0	1	1	
06:45	2	2	0	2	2	4	17
07:00	1	2	0	1	1	3	
07:15	0	1	0	1	0	2	
07:30	1	1	0	1	1	2	
07:45	2	1	1	1	3	2	9
08:00	2	2	1	1	3	3	
08:15	4	1	2	2	6	3	
08:30	7	1	2	0	9	1	
08:45	12	0	2	0	14	0	7
09:00	21	0	1	1	22	1	
09:15	8	0	5	0	13	0	
09:30	12	0	6	0	18	0	
09:45	14	0	7	0	21	0	1
10:00	17	0	5	0	22	0	
10:15	28	0	13	0	41	0	
10:30	14	0	4	0	18	0	
10:45	24	0	1	0	25	0	0
11:00	23	0	2	0	25	0	
11:15	13	0	5	0	18	0	
11:30	19	0	5	1	24	1	
11:45	13	0	6	0	19	0	1
Total	238	168	73	308	311	476	
Percent	76.5%	35.3%	23.5%	64.7%			
Day Total		406		381		787	
Peak Vol.	10:15 89	12:00 39	09:30 31	00:45 65	10:15 109	00:30 102	- - -
P.H.F.	0.795	0.696	0.596	0.903	0.665	0.850	

Grove Street  
south of Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 B Volume  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	SB				NB				Combined		29-Aug-15 Sat	
Time	A.M.		P.M.		A.M.		P.M.		A.M.	P.M.		
12:00	0		6		0		7		0	13		
12:15	0		7		0		8		0	15		
12:30	0		10		0		10		0	20		
12:45	0	0	7	30	0	0	6	31	0	13	61	
01:00	0		7		0		6		0	13		
01:15	0		11		0		13		0	24		
01:30	0		10		0		7		0	17		
01:45	0	0	7	35	0	0	9	35	0	16	70	
02:00	0		13		0		10		0	23		
02:15	0		5		0		9		0	14		
02:30	0		13		0		8		0	21		
02:45	0	0	7	38	0	0	8	35	0	15	73	
03:00	0		8		0		10		0	18		
03:15	0		9		0		14		0	23		
03:30	0		5		0		8		0	13		
03:45	0	0	5	27	0	0	6	38	0	11	65	
04:00	0		3		0		4		0	7		
04:15	0		4		0		4		0	8		
04:30	0		3		0		9		0	12		
04:45	0	0	5	15	0	0	12	29	0	17	44	
05:00	0		3		0		11		0	14		
05:15	0		8		0		24		0	32		
05:30	1		2		0		14		1	16		
05:45	1	2	1	14	0	0	3	52	1	4	66	
06:00	0		0		1		1		1	1		
06:15	0		5		0		5		0	10		
06:30	0		1		0		2		0	3		
06:45	0	0	2	8	0	1	1	9	0	3	17	
07:00	0		1		0		3		0	4		
07:15	0		2		0		1		0	3		
07:30	3		1		1		2		4	3		
07:45	1	4	2	6	1	2	2	8	2	4	14	
08:00	1		1		0		0		1	1		
08:15	3		0		4		0		7	0		
08:30	0		0		2		2		2	2		
08:45	7	11	0	1	1	7	0	2	8	0	3	
09:00	5		1		1		0		6	1		
09:15	2		0		2		0		4	0		
09:30	4		0		3		0		7	0		
09:45	9	20	0	1	2	8	0	0	11	0	1	
10:00	11		0		6		0		17	0		
10:15	10		1		3		0		13	1		
10:30	3		0		2		0		5	0		
10:45	11	35	0	1	2	13	0	0	13	0	1	
11:00	9		0		5		0		14	0		
11:15	10		1		3		1		13	2		
11:30	13		1		7		0		20	1		
11:45	17	49	0	2	2	17	0	1	19	0	3	
Total	121		178		48		240		169	418		
Percent	71.6%		42.6%		28.4%		57.4%					
Day Total		299				288			587			
Peak	11:00	-	01:15	-	10:45	-	04:45	-	11:00	-	01:15	-
Vol.	49	-	41	-	17	-	61	-	66	-	80	-
P.H.F.	0.721		0.788		0.607		0.635		0.825		0.833	

- **Shawme Road**

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
09:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
10:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12 PM	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
13:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
14:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
15:00	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
16:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
17:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
18:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
19:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	110	1	0	0	0	0	0	0	0	0	0	0	0	0	111
Percent	99.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00														09:00
Vol.	14														14
PM Peak	15:00	12:00													15:00
Vol.	18	1													18

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
09:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
10:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
11:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
12 PM	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
13:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
14:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15:00	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
16:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
17:00	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
18:00	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
19:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	124	1	0	0	0	0	0	0	0	0	0	0	0	0	125
Percent	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00														09:00
Vol.	15														15
PM Peak	17:00	19:00													17:00
Vol.	18	1													18

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

SB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12 PM	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
13:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
14:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
15:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
16:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
17:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	81	0	0	0	0	0	0	0	0	0	0	0	0	0	81
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	09:00														09:00
Vol.	4														4
PM															
Peak	14:00														14:00
Vol.	12														12

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
08:00	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
09:00	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
10:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
11:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
12 PM	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
13:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
14:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15:00	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
16:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
19:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
20:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	119	2	0	0	0	0	0	0	0	0	0	0	0	0	121
Percent	98.3%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	08:00														08:00
Vol.	19														19
PM															
Peak	12:00	12:00													12:00
Vol.	8	1													9

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
08:00	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
09:00	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21
10:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
11:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
12 PM	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
13:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
14:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
16:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
17:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
18:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	131	1	0	0	0	0	0	0	0	0	0	0	0	0	132
Percent	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	09:00													08:00
Vol.	23	1													23
PM Peak	12:00														12:00
Vol.	16														16

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

NB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
08:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
09:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
10:00	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
11:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
12 PM	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
13:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
14:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
15:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
16:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	86	0	0	0	0	0	0	0	0	0	0	0	0	0	86
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM	11:00														11:00
Peak															
Vol.	13														13
PM	14:00														14:00
Peak															
Vol.	8														8

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	SB				NB				Combin ed		27-Aug- 15 Thu			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.			
12:00	0		2		0		0		0		2			
12:15	0		2		0		1		0		3			
12:30	0		2		0		4		0		6			
12:45	0	0	1	7	0	0	4	9	0	0	5	16		
01:00	0		2		0		2		0		4			
01:15	0		6		1		4		1		10			
01:30	0		2		0		1		0		3			
01:45	0	0	1	11	0	1	1	8	0	1	2	19		
02:00	0		0		0		3		0		3			
02:15	0		1		0		3		0		4			
02:30	0		5		0		0		0		5			
02:45	0	0	3	9	0	0	0	6	0	0	3	15		
03:00	1		3		0		2		1		5			
03:15	0		4		0		1		0		5			
03:30	0		7		0		1		0		8			
03:45	0	1	4	18	0	0	5	9	0	1	9	27		
04:00	0		7		0		0		0		7			
04:15	0		1		0		2		0		3			
04:30	0		3		0		2		0		5			
04:45	0	0	3	14	0	0	4	8	0	0	7	22		
05:00	0		4		0		0		0		4			
05:15	0		0		0		1		0		1			
05:30	0		2		0		1		0		3			
05:45	1	1	1	7	0	0	0	2	1	1	1	9		
06:00	0		5		0		1		0		6			
06:15	0		2		0		0		0		2			
06:30	0		1		0		1		0		2			
06:45	1	1	0	8	0	0	3	5	1	1	3	13		
07:00	0		1		0		1		0		2			
07:15	0		1		1		1		1		2			
07:30	0		0		1		1		1		1			
07:45	0	0	1	3	2	4	0	3	2	4	1	6		
08:00	0		0		2		0		2		0			
08:15	4		1		5		1		9		2			
08:30	1		1		3		0		4		1			
08:45	1	6	0	2	9	19	1	2	10	25	1	4		
09:00	4		1		13		0		17		1			
09:15	5		0		1		0		6		0			
09:30	5		0		3		0		8		0			
09:45	0	14	0	1	0	17	1	1	0	31	1	2		
10:00	0		0		0		0		0		0			
10:15	2		0		6		0		8		0			
10:30	1		0		4		1		5		1			
10:45	2	5	0	0	4	14	0	1	6	19	0	1		
11:00	0		0		3		0		3		0			
11:15	0		0		1		0		1		0			
11:30	0		0		4		0		4		0			
11:45	3	3	0	0	4	12	0	0	7	15	0	0		
Total	31		80		67		54		98		134			
Percent	31.6%		59.7%		68.4%		40.3%							
Day Total		111				121				232				
Peak	08:45	-	03:15	-	08:15	-	00:30	-	08:45	-	03:15	-	-	-
Vol.	15	-	22	-	30	-	14	-	41	-	29	-	-	-
P.H.F.	0.750		0.786		0.577		0.875		0.603		0.806			

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	SB		NB		Combined		28-Aug-15 Fri
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	0	2	0	3	0	5	
12:15	0	4	1	3	1	7	
12:30	0	1	0	5	0	6	
12:45	0	3	0	5	0	8	26
01:00	0	6	0	2	0	8	
01:15	0	3	0	1	0	4	
01:30	0	2	0	2	0	4	
01:45	0	1	0	2	0	3	19
02:00	0	2	0	0	0	2	
02:15	0	1	0	1	0	2	
02:30	0	1	0	2	0	3	
02:45	0	1	0	2	0	3	10
03:00	0	4	0	3	0	7	
03:15	0	5	0	3	0	8	
03:30	0	3	0	5	0	8	
03:45	0	4	0	2	0	6	29
04:00	0	5	0	2	0	7	
04:15	0	2	0	0	0	2	
04:30	0	2	0	3	0	5	
04:45	0	2	0	2	0	4	18
05:00	0	4	0	4	0	8	
05:15	0	7	0	1	0	8	
05:30	0	6	0	3	0	9	
05:45	0	1	0	0	0	1	26
06:00	0	2	0	1	0	3	
06:15	0	3	0	0	0	3	
06:30	1	2	0	1	1	3	
06:45	1	3	1	0	2	3	12
07:00	0	4	0	0	0	4	
07:15	0	0	0	0	0	0	
07:30	0	0	2	0	2	0	
07:45	1	0	3	5	0	0	4
08:00	1	0	4	1	5	1	
08:15	3	0	6	0	9	0	
08:30	0	0	0	0	0	0	
08:45	1	0	13	23	14	1	2
09:00	3	0	11	0	14	0	
09:15	5	1	6	0	11	1	
09:30	4	0	1	0	5	0	
09:45	3	0	3	21	6	0	1
10:00	2	0	6	1	8	1	
10:15	1	0	4	0	5	0	
10:30	3	0	0	0	3	0	
10:45	0	0	4	14	4	0	1
11:00	3	0	2	0	5	0	
11:15	2	1	1	1	3	2	
11:30	2	1	2	0	4	1	
11:45	0	0	0	5	0	0	3
Total	36	89	70	62	106	151	
Percent	34.0%	58.9%	66.0%	41.1%			
Day Total		125		132		257	
Peak	09:00	-	04:45	-	08:45	-	00:15
Vol.	15	-	19	-	16	-	29
P.H.F.	0.750		0.679		0.800		0.906

Shawme Road  
north of Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 C VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	SB		NB		Combined		29-Aug-15 Sat	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	0	1	0	2	0	3		
12:15	0	3	0	1	0	4		
12:30	1	0	0	2	1	2		
12:45	0	2	0	0	0	4	13	
01:00	0	1	0	4	0	5		
01:15	0	2	0	1	0	3		
01:30	0	3	0	1	0	4		
01:45	0	2	0	0	0	3	15	
02:00	0	2	0	4	0	6		
02:15	0	4	0	1	0	5		
02:30	0	4	0	1	0	5		
02:45	0	2	0	0	0	4	20	
03:00	0	1	0	0	0	1		
03:15	0	2	0	2	0	4		
03:30	0	2	0	1	0	3		
03:45	0	4	0	0	0	5	13	
04:00	0	2	0	1	0	3		
04:15	0	1	0	0	0	1		
04:30	0	3	0	1	0	4		
04:45	0	2	0	0	0	2	10	
05:00	0	0	0	0	0	0		
05:15	0	5	0	0	0	5		
05:30	1	0	0	1	1	1		
05:45	0	1	0	0	0	1	7	
06:00	0	0	0	0	0	0		
06:15	0	0	0	1	0	1		
06:30	0	0	0	0	0	0		
06:45	0	3	0	0	0	5	6	
07:00	0	1	1	0	1	1		
07:15	0	3	0	0	0	3		
07:30	1	0	2	0	3	0		
07:45	1	2	1	4	2	2	6	
08:00	1	0	2	0	3	0		
08:15	1	0	2	1	3	1		
08:30	0	0	2	0	2	0		
08:45	0	2	0	12	6	0	1	
09:00	0	0	5	0	5	0		
09:15	1	1	1	0	2	1		
09:30	2	0	2	0	4	0		
09:45	1	4	0	11	4	1	2	
10:00	1	2	2	2	3	4		
10:15	0	2	3	0	3	2		
10:30	2	0	2	0	4	0		
10:45	1	4	3	10	4	0	6	
11:00	1	0	3	0	4	0		
11:15	2	0	5	0	7	0		
11:30	1	0	4	0	5	0		
11:45	0	4	0	13	1	0	0	
Total	18	63	50	36	68	99		
Percent	26.5%	63.6%	73.5%	36.4%				
Day Total		81		86		167		
Peak	10:30	-	01:45	-	08:15	-	10:45	-
Vol.	6	-	12	-	15	-	20	-
P.H.F.	0.750	-	0.750	-	0.625	-	0.563	-

- **Adventure Park Driveway (west of Shawme Road)**

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	17	1	0	0	0	0	0	0	0	0	0	0	0	0	18
09:00	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	24	0	0	0	0	0	0	0	0	0	0	0	0	0	24
12 PM	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
13:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
14:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
15:00	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
16:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	140	2	0	0	0	0	0	0	0	0	0	0	0	0	142
Percent	98.6%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	08:00													09:00
Vol.	24	1													24
PM Peak	12:00	15:00													12:00
Vol.	20	1													20

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
08:00	19	0	0	0	0	0	0	0	0	0	0	0	0	0	19
09:00	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
10:00	55	1	0	0	0	0	0	0	0	0	0	0	0	0	56
11:00	78	0	0	0	0	0	0	0	0	0	0	0	0	0	78
12 PM	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29
13:00	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
14:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15:00	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
16:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	247	2	0	0	0	0	0	0	0	0	0	0	0	0	249
Percent	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	10:00													11:00
Vol.	78	1													78
PM Peak	12:00	15:00													12:00
Vol.	29	1													29

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
09:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
10:00	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
11:00	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
12 PM	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
13:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
14:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
15:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
16:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	135	0	0	0	0	0	0	0	0	0	0	0	0	0	135
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	10:00														10:00
Vol.	21														21
PM															
Peak	12:00														12:00
Vol.	16														16

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
10:00	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
11:00	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
12 PM	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
13:00	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
14:00	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
15:00	14	1	0	0	0	0	0	0	0	0	0	0	0	0	15
16:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
17:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
18:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
19:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	147	1	0	0	0	0	0	0	0	0	0	0	0	0	148
Percent	99.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	10:00														10:00
Vol.	22														22
PM															
Peak	12:00	15:00													12:00
Vol.	21	1													21

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	18	1	0	0	0	0	0	0	0	0	0	0	0	0	19
10:00	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
11:00	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
12 PM	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
13:00	48	0	0	0	0	0	0	0	0	0	0	0	0	0	48
14:00	35	0	0	0	0	0	0	0	0	0	0	0	0	0	35
15:00	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
16:00	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
17:00	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
18:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	234	2	0	0	0	0	0	0	0	0	0	0	0	0	236
Percent	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	09:00													09:00
Vol.	18	1													19
PM Peak	13:00														13:00
Vol.	48														48

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
11:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
12 PM	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
13:00	23	0	0	0	0	0	0	0	0	0	0	0	0	0	23
14:00	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
15:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16:00	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
17:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
18:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
19:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	130	0	0	0	0	0	0	0	0	0	0	0	0	0	130
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	11:00														11:00
Vol.	9														9
PM															
Peak	14:00														14:00
Vol.	26														26

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	WB				EB				Combin ed		27-Aug- 15 Thu			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.			
12:00	0		11		0		6		0		17			
12:15	0		3		0		3		0		6			
12:30	0		3		0		7		0		10			
12:45	0	0	3	20	0	0	5	21	0	0	8	41		
01:00	0		2		0		7		0		9			
01:15	0		2		0		4		0		6			
01:30	0		2		0		5		0		7			
01:45	0	0	1	7	0	0	5	21	0	0	6	28		
02:00	0		6		0		3		0		9			
02:15	0		6		0		8		0		14			
02:30	0		1		0		6		0		7			
02:45	0	0	1	14	0	0	3	20	0	0	4	34		
03:00	0		1		0		6		0		7			
03:15	0		1		0		2		0		3			
03:30	0		4		0		4		0		8			
03:45	0	0	2	8	0	0	3	15	0	0	5	23		
04:00	0		1		0		6		0		7			
04:15	0		0		0		3		0		3			
04:30	0		0		0		3		0		3			
04:45	0	0	2	3	0	0	2	14	0	0	4	17		
05:00	0		0		0		0		0		0			
05:15	0		0		0		2		0		2			
05:30	0		1		0		1		0		2			
05:45	0	0	0	1	0	0	2	5	0	0	2	6		
06:00	0		0		0		5		0		5			
06:15	0		0		0		1		0		1			
06:30	0		0		0		2		0		2			
06:45	0	0	0	0	0	0	1	9	0	0	1	9		
07:00	0		0		0		2		0		2			
07:15	0		0		0		0		0		0			
07:30	2		0		0		0		2		0			
07:45	0	2	0	0	0	0	0	2	0	2	0	2		
08:00	3		0		0		0		3		0			
08:15	5		0		0		0		5		0			
08:30	5		0		0		0		5		0			
08:45	5	18	0	0	0	0	0	0	5	18	0	0		
09:00	5		0		0		0		5		0			
09:15	6		0		0		0		6		0			
09:30	7		0		5		0		12		0			
09:45	6	24	0	0	2	7	0	0	8	31	0	0		
10:00	3		0		7		0		10		0			
10:15	6		0		2		0		8		0			
10:30	8		0		5		0		13		0			
10:45	4	21	0	0	8	22	0	0	12	43	0	0		
11:00	1		0		4		0		5		0			
11:15	4		0		3		0		7		0			
11:30	6		0		1		0		7		0			
11:45	13	24	0	0	4	12	0	0	17	36	0	0		
Total	89		53		41		107		130		160			
Percent	68.5%		33.1%		31.5%		66.9%							
Day Total			142				148				290			
Peak	09:00	-	12:00	-	10:00	-	00:30	-	10:00	-	12:00	-	-	-
Vol.	24	-	20	-	22	-	23	-	43	-	41	-	-	-
P.H.F.	0.857		0.455		0.688		0.821		0.827		0.603			

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	WB		EB		Combined		28-Aug-15 Fri
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	0	13	0	5	0	18	
12:15	0	11	0	10	0	21	
12:30	0	2	0	4	0	6	
12:45	0	3	0	14	0	17	62
01:00	0	5	0	15	0	20	
01:15	0	2	0	12	0	14	
01:30	0	2	0	13	0	15	
01:45	0	4	0	8	0	12	61
02:00	0	2	0	11	0	13	
02:15	0	0	0	8	0	8	
02:30	0	2	0	8	0	10	
02:45	0	2	0	8	0	10	41
03:00	0	4	0	9	0	13	
03:15	0	3	0	9	0	12	
03:30	0	3	0	8	0	11	
03:45	0	3	0	6	0	9	45
04:00	0	1	0	9	0	10	
04:15	0	1	0	7	0	8	
04:30	0	0	0	1	0	1	
04:45	0	1	0	3	0	4	23
05:00	0	0	0	5	0	5	
05:15	0	1	0	2	0	3	
05:30	0	0	0	3	0	3	
05:45	0	0	0	6	0	6	17
06:00	0	0	0	3	0	3	
06:15	0	0	0	3	0	3	
06:30	0	0	0	3	0	3	
06:45	0	0	0	0	0	0	9
07:00	1	0	0	0	1	0	
07:15	0	0	0	0	0	0	
07:30	2	0	0	0	2	0	
07:45	2	0	0	0	2	0	0
08:00	3	0	1	0	4	0	
08:15	4	0	0	0	4	0	
08:30	6	0	0	0	6	0	
08:45	6	0	0	1	6	0	0
09:00	13	0	4	0	17	0	
09:15	6	0	2	0	8	0	
09:30	5	0	6	0	11	0	
09:45	2	0	7	19	9	0	0
10:00	8	0	6	0	14	0	
10:15	2	0	2	0	4	0	
10:30	14	0	4	0	18	0	
10:45	32	0	1	13	33	0	0
11:00	35	0	5	0	40	0	
11:15	21	0	3	0	24	0	
11:30	12	0	2	0	14	0	
11:45	10	0	0	10	10	0	0
Total	184	65	43	193	227	258	
Percent	81.1%	25.2%	18.9%	74.8%			
Day Total		249		236		485	
Peak Vol.	10:30 102	12:00 29	09:15 21	00:45 54	10:30 115	00:45 66	
P.H.F.	0.729	0.558	0.750	0.900	0.719	0.825	

Adventure Park Driveway  
west of Shawme Road  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 D VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start	WB				EB				Combin ed		29-Aug- 15 Sat			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.			
12:00	0		4		0		1		0		5			
12:15	0		6		0		2		0		8			
12:30	0		3		0		8		0		11			
12:45	0	0	3	16	0	0	6	17	0	0	9	33		
01:00	0		2		0		3		0		5			
01:15	0		7		0		9		0		16			
01:30	0		0		0		4		0		4			
01:45	0	0	2	11	0	0	7	23	0	0	9	34		
02:00	0		5		0		5		0		10			
02:15	0		3		0		8		0		11			
02:30	0		4		0		9		0		13			
02:45	0	0	3	15	0	0	4	26	0	0	7	41		
03:00	0		5		0		2		0		7			
03:15	0		4		0		3		0		7			
03:30	0		0		0		0		0		0			
03:45	0	0	0	9	0	0	0	5	0	0	0	14		
04:00	0		0		0		2		0		2			
04:15	0		3		0		0		0		3			
04:30	0		4		0		5		0		9			
04:45	0	0	4	11	0	0	7	14	0	0	11	25		
05:00	0		2		0		5		0		7			
05:15	0		0		0		3		0		3			
05:30	0		0		0		1		0		1			
05:45	0	0	0	2	0	0	2	11	0	0	2	13		
06:00	0		0		0		4		0		4			
06:15	0		1		0		3		0		4			
06:30	0		0		0		0		0		0			
06:45	0	0	0	1	0	0	1	8	0	0	1	9		
07:00	0		0		0		1		0		1			
07:15	0		0		0		2		0		2			
07:30	1		0		0		3		1		3			
07:45	1	2	0	0	0	0	0	6	1	2	0	6		
08:00	2		0		0		0		2		0			
08:15	4		0		0		0		4		0			
08:30	1		0		0		0		1		0			
08:45	8	15	0	0	0	0	0	0	8	15	0	0		
09:00	4		0		0		0		4		0			
09:15	3		0		0		0		3		0			
09:30	3		0		1		0		4		0			
09:45	4	14	0	0	2	3	0	0	6	17	0	0		
10:00	7		0		1		0		8		0			
10:15	6		0		3		0		9		0			
10:30	5		0		1		0		6		0			
10:45	3	21	0	0	3	8	0	0	6	29	0	0		
11:00	6		0		1		0		7		0			
11:15	6		0		5		0		11		0			
11:30	3		0		2		0		5		0			
11:45	3	18	0	0	1	9	0	0	4	27	0	0		
Total	70		65		20		110		90		175			
Percent	77.8%		37.1%		22.2%		62.9%							
Day Total			135				130				265			
Peak	09:45	-	12:00	-	10:45	-	01:45	-	10:30	-	01:45	-	-	-
Vol.	22	-	16	-	11	-	29	-	30	-	43	-	-	-
P.H.F.	0.786		0.667		0.550		0.806		0.682		0.672			

- **Adventure Park Driveway (east of Pocasset Street)**

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Percent	87.5%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00													11:00
Vol.	3	1													3
PM Peak	17:00														17:00
Vol.	2														2

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
14:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	29	1	0	0	0	0	0	0	0	0	0	0	0	0	30
Percent	96.7%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00														10:00
Vol.	9														9
PM Peak	13:00	15:00													13:00
Vol.	6	1													6

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

WB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	08:00														08:00
Vol.	1														1
PM															
Peak	16:00														16:00
Vol.	4														4

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/27/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM															
Peak	09:00														09:00
Vol.	4														4
PM															
Peak	12:00														12:00
Vol.	2														2

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/28/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
09:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
10:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21
Percent	95.2%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	09:00													08:00
Vol.	4	1													4
PM Peak	12:00														12:00
Vol.	3														3

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E CLASS  
Site Code: 82992.15  
Date Start: 27-Aug-15

EB

Start Time	Cars	Medium Heavy	Large Heavy												Total
08/29/1															
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	17	1	0	0	0	0	0	0	0	0	0	0	0	0	18
Percent	94.4%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00													07:00
Vol.	2	1													2
PM Peak	13:00														13:00
Vol.	2														2

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	WB		EB		Combin ed		27-Aug-15 Thu
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	0	0	0	0	0	0	
12:15	0	0	0	0	0	0	
12:30	0	0	0	2	0	2	
12:45	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	
01:15	0	0	0	0	0	0	
01:30	0	0	0	0	0	0	
01:45	0	0	0	1	0	1	1
02:00	0	0	0	1	0	1	
02:15	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	
02:45	0	0	0	0	0	0	1
03:00	0	0	0	1	0	1	
03:15	0	0	0	0	0	0	
03:30	0	0	0	1	0	1	
03:45	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	
04:15	0	0	0	1	0	1	
04:30	0	1	0	0	0	1	
04:45	0	0	1	0	0	0	2
05:00	0	0	0	0	0	0	
05:15	0	0	0	1	0	1	
05:30	0	1	0	0	0	1	
05:45	0	1	2	0	0	2	4
06:00	0	1	0	0	0	1	
06:15	0	0	0	0	0	0	
06:30	0	0	0	0	0	0	
06:45	0	0	1	0	0	0	1
07:00	0	0	0	0	0	0	
07:15	0	0	0	0	0	0	
07:30	0	0	1	0	1	0	
07:45	0	0	0	1	0	0	0
08:00	0	0	0	0	0	0	
08:15	1	0	2	0	3	0	
08:30	0	0	0	0	0	0	
08:45	0	0	0	2	0	0	0
09:00	0	0	1	0	1	0	
09:15	0	0	1	0	1	0	
09:30	0	0	2	0	2	0	
09:45	0	0	0	4	0	0	0
10:00	0	0	0	0	0	0	
10:15	0	0	0	0	0	0	
10:30	0	0	0	0	0	0	
10:45	0	0	0	0	0	0	0
11:00	0	0	1	0	1	0	
11:15	2	0	1	0	3	0	
11:30	1	0	0	0	1	0	
11:45	0	0	0	2	0	0	0
Total	4	4	9	9	13	13	
Percent	30.8%	30.8%	69.2%	69.2%			
Day Total		8		18		26	
Peak	10:45	-	05:15	-	08:45	-	12:00
Vol.	3	-	3	-	4	-	2
P.H.F.	0.375		0.750		0.500		0.250

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	WB		EB		Combined		28-Aug-15 Fri	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	0	1	0	0	0	1		
12:15	0	0	0	2	0	2		
12:30	0	2	0	0	0	2		
12:45	0	0	3	0	0	1	6	
01:00	0	0	0	0	0	0		
01:15	0	3	0	0	0	3		
01:30	0	2	0	1	0	3		
01:45	0	1	6	0	0	1	7	
02:00	0	1	0	0	0	1		
02:15	0	0	0	0	0	0		
02:30	0	0	0	0	0	0		
02:45	0	2	3	0	0	2	3	
03:00	0	1	0	0	0	1		
03:15	0	0	0	0	0	0		
03:30	0	0	0	1	0	1		
03:45	0	0	1	0	0	1	3	
04:00	0	0	0	1	0	1		
04:15	0	0	0	0	0	0		
04:30	0	0	0	0	0	0		
04:45	0	0	0	0	0	0	1	
05:00	0	0	0	0	0	0		
05:15	0	0	0	0	0	0		
05:30	0	0	0	0	0	0		
05:45	0	0	0	0	0	0	0	
06:00	0	2	0	0	0	2		
06:15	0	0	0	0	0	0		
06:30	0	0	0	0	0	0		
06:45	0	1	3	0	0	1	3	
07:00	0	0	0	0	0	0		
07:15	0	0	0	0	0	0		
07:30	0	0	0	0	0	0		
07:45	0	0	0	1	1	0	0	
08:00	0	0	0	0	0	0		
08:15	0	0	1	0	1	0		
08:30	1	0	1	0	2	0		
08:45	0	1	0	2	4	0	0	
09:00	1	0	1	0	2	0		
09:15	0	0	0	0	0	0		
09:30	0	0	1	0	1	0		
09:45	0	1	0	1	3	0	0	
10:00	0	0	0	0	0	0		
10:15	1	0	1	0	2	0		
10:30	1	0	1	0	2	0		
10:45	7	9	0	1	3	0	0	
11:00	0	0	1	0	1	0		
11:15	0	0	0	0	0	0		
11:30	0	0	1	0	1	0		
11:45	3	3	0	1	3	0	0	
Total	14	16	14	7	28	23		
Percent	50.0%	69.6%	50.0%	30.4%				
Day Total		30		21		51		
Peak Vol.	10:00 9	- 01:15 7	- 08:15 5	- 12:00 3	- 10:15 13	- 01:15 8	- - -	- - -
P.H.F.	0.321	0.583	0.625	0.375	0.406	0.667		

Adventure Park Driveway  
east of Pocasset Street  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

154611 E VOLUME  
Site Code: 82992.15  
Date Start: 27-Aug-15

Start Time	WB		EB		Combin ed		29-Aug-15 Sat	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00	0	1	0	0	0	1		
12:15	0	0	0	0	0	0		
12:30	0	0	0	0	0	0		
12:45	0	0	1	0	0	1	2	
01:00	0	1	0	0	0	1		
01:15	0	0	0	1	0	1		
01:30	0	0	0	0	0	0		
01:45	0	1	2	0	0	2	4	
02:00	0	1	0	0	0	1		
02:15	0	0	0	0	0	0		
02:30	0	0	0	0	0	0		
02:45	0	0	1	0	0	1	2	
03:00	0	0	0	1	0	1		
03:15	0	0	0	1	0	1		
03:30	0	0	0	0	0	0		
03:45	0	0	0	0	0	0	2	
04:00	0	1	0	0	0	1		
04:15	0	1	0	1	0	2		
04:30	0	0	0	0	0	0		
04:45	0	2	4	0	0	3	6	
05:00	0	0	0	1	0	1		
05:15	0	0	0	0	0	0		
05:30	0	0	0	0	0	0		
05:45	0	0	0	0	0	0	1	
06:00	0	2	0	0	0	2		
06:15	0	0	0	0	0	0		
06:30	0	0	0	0	0	0		
06:45	0	0	2	0	0	0	2	
07:00	0	0	0	1	0	1		
07:15	0	2	0	0	0	2		
07:30	0	0	2	0	2	0		
07:45	0	0	2	0	1	0	3	
08:00	1	0	0	0	1	0		
08:15	0	0	1	0	1	0		
08:30	0	0	1	0	1	0		
08:45	0	1	0	0	0	0	0	
09:00	0	0	0	0	0	0		
09:15	0	0	0	0	0	0		
09:30	0	0	0	0	0	0		
09:45	0	0	0	1	1	0	0	
10:00	0	0	1	0	1	0		
10:15	0	0	0	0	0	0		
10:30	0	0	0	0	0	0		
10:45	0	0	0	1	0	0	0	
11:00	0	0	0	0	0	0		
11:15	0	0	1	0	1	0		
11:30	0	0	0	0	0	0		
11:45	1	0	1	2	0	0	0	
Total	2	12	8	10	10	22		
Percent	20.0%	54.5%	80.0%	45.5%				
Day Total		14		18		32		
Peak Vol.	07:15 1	- 04:00 4	- 07:30 3	- 02:30 3	- 07:30 4	- 04:00 6	- - -	
P.H.F.	0.250	0.500	0.375	0.750	0.500	0.500		

## ➤ **Arrival Pattern Observations**



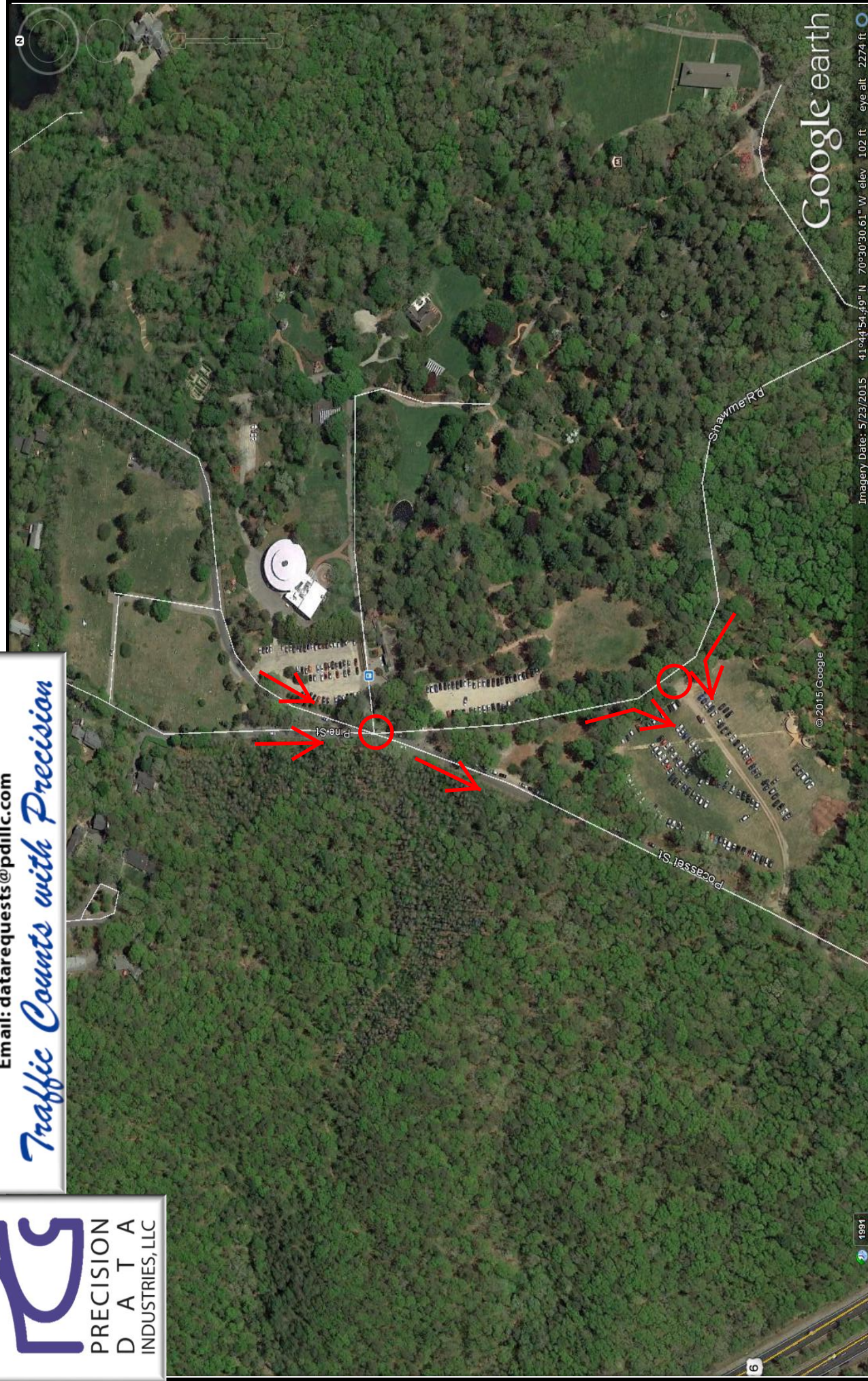
PRECISION  
DATA  
INDUSTRIES, LLC

PRECISION DATA INDUSTRIES, LLC

Office: 508.481.3999 Fax: 508.545.1234

Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

*Traffic Counts with Precision*



Client:  
VHB

Engineer:  
P. Dunford

Site Code:  
82992.15

Date:  
Thursday 9/3/2015

PDI Job Number:  
154624

City, State:  
Sandwich, MA



**PDI File# 154624 B**

**City, State: Sandwich, MA**

### Enter into Directions Column

**Client: VHB/ P. Dunford**

**SB = Right Turns into Lot**

**Client #:** 82992.15

**NB = Left Turns into Lot**

**Date:** Thursday 9/3/2015

**\*\* Write down last 3 digits of plate**

**Time: 1pm-3pm**

[illegible]

## ➤ **Turning Movement Counts**



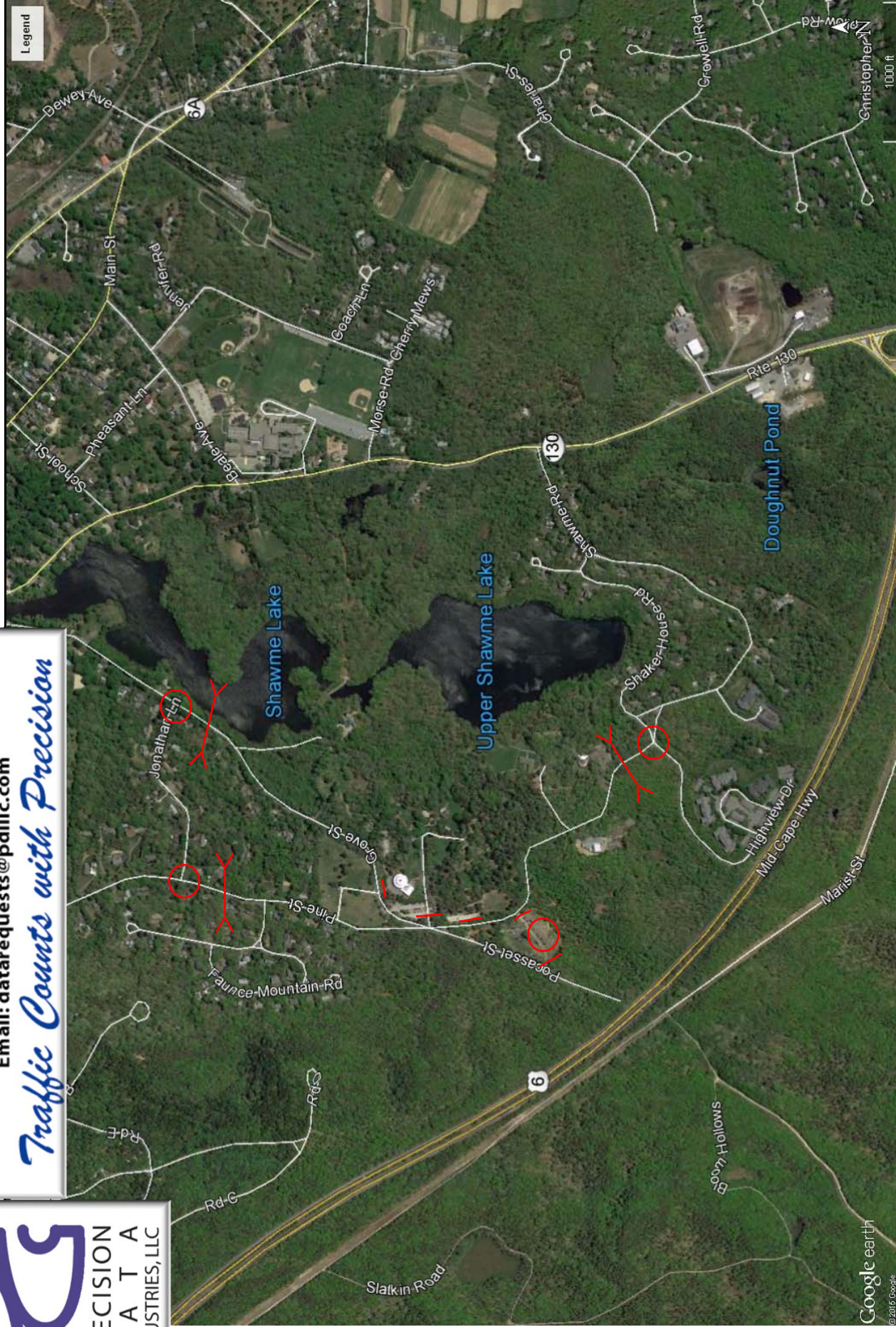
PRECISION  
DATA  
INDUSTRIES, LLC

PRECISION DATA INDUSTRIES, LLC

Office: 508.481.3999 Fax: 508.545.1234

Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

*Traffic Counts with Precision*



Client:

Conley Associates

Engineer:

L. Grant

Site Code:

TBA

Date:

Thurs 8/13/15

PDI Job Number:

154598

City, State:

Sutton, MA

- **Pine Street at Jonathan Lane**



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 A  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Pine Street From North			Jonathan Lane From East			Pine Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	6	0	0	0	0	0	0	10	0	16
04:15 PM	3	0	0	0	0	0	0	8	0	11
04:30 PM	6	0	0	5	0	0	0	6	0	17
04:45 PM	2	3	0	0	2	0	1	5	0	13
Total	17	3	0	5	2	0	1	29	0	57
05:00 PM	7	1	0	0	0	0	0	10	0	18
05:15 PM	6	0	0	1	0	0	1	7	0	15
05:30 PM	4	2	0	0	3	0	0	3	0	12
05:45 PM	1	1	0	2	0	3	0	6	0	13
Total	18	4	0	3	3	3	1	26	0	58
Grand Total	35	7	0	8	5	3	2	55	0	115
Apprch %	83.3	16.7	0	50	31.2	18.8	3.5	96.5	0	
Total %	30.4	6.1	0	7	4.3	2.6	1.7	47.8	0	
Cars	34	7	0	8	5	3	1	54	0	112
% Cars	97.1	100	0	100	100	100	50	98.2	0	97.4
Heavy Vehicles	1	0	0	0	0	0	1	1	0	3
% Heavy Vehicles	2.9	0	0	0	0	0	50	1.8	0	2.6

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	6	0	0	6	5	0	0	5	0	6	0	6	17
04:45 PM	2	3	0	5	0	2	0	2	1	5	0	6	13
05:00 PM	7	1	0	8	0	0	0	0	0	10	0	10	18
05:15 PM	6	0	0	6	1	0	0	1	1	7	0	8	15
Total Volume	21	4	0	25	6	2	0	8	2	28	0	30	63
% App. Total	84	16	0		75	25	0		6.7	93.3	0		
PHF	.750	.333	.000	.781	.300	.250	.000	.400	.500	.700	.000	.750	.875
Cars	20	4	0	24	6	2	0	8	1	28	0	29	61
% Cars	95.2	100	0	96.0	100	100	0	100	50.0	100	0	96.7	96.8
Heavy Vehicles	1	0	0	1	0	0	0	0	1	0	0	1	2
% Heavy Vehicles	4.8	0	0	4.0	0	0	0	0	50.0	0	0	3.3	3.2



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

**Groups Printed- Cars**

File Name : 154611 A  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

Start Time	Pine Street From North			Jonathan Lane From East			Pine Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	6	0	0	0	0	0	0	9	0	15
04:15 PM	3	0	0	0	0	0	0	8	0	11
04:30 PM	5	0	0	5	0	0	0	6	0	16
04:45 PM	2	3	0	0	2	0	0	5	0	12
Total	16	3	0	5	2	0	0	28	0	54
05:00 PM	7	1	0	0	0	0	0	10	0	18
05:15 PM	6	0	0	1	0	0	1	7	0	15
05:30 PM	4	2	0	0	3	0	0	3	0	12
05:45 PM	1	1	0	2	0	3	0	6	0	13
Total	18	4	0	3	3	3	1	26	0	58
Grand Total	34	7	0	8	5	3	1	54	0	112
Apprch %	82.9	17.1	0	50	31.2	18.8	1.8	98.2	0	
Total %	30.4	6.2	0	7.1	4.5	2.7	0.9	48.2	0	

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	5	0	0	5	5	0	0	5	0	6	0	6	16
04:45 PM	2	3	0	5	0	2	0	2	0	5	0	5	12
05:00 PM	7	1	0	8	0	0	0	0	0	10	0	10	18
05:15 PM	6	0	0	6	1	0	0	1	1	7	0	8	15
Total Volume	20	4	0	24	6	2	0	8	1	28	0	29	61
% App. Total	83.3	16.7	0		75	25	0		3.4	96.6	0		
PHF	.714	.333	.000	.750	.300	.250	.000	.400	.250	.700	.000	.725	.847



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Heavy Vehicles

File Name : 154611 A  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

Start Time	Pine Street From North			Jonathan Lane From East			Pine Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
04:00 PM	0	0	0	0	0	0	0	1	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	1	0	0	1
Total	1	0	0	0	0	0	1	1	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	0	0	1	1	0	3
Apprch %	100	0	0	0	0	0	50	50	0	
Total %	33.3	0	0	0	0	0	33.3	33.3	0	

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
Total Volume	1	0	0	1	0	0	0	0	1	1	0	2	3
% App. Total	100	0	0		0	0	0		50	50	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.250	.250	.000	.500	.750



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Peds and Bikes

File Name : 154611 A  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

Pine Street From North					Jonathan Lane From East				Pine Street From South				Int. Total
Start Time	Thru	Left	Peds EB	Peds WB	Right	Left	Peds SB	Peds NB	Right	Thru	Peds WB	Peds EB	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	0	0	0	0	0	1	2	2	0	0	0	0	5
Grand Total	0	0	0	0	0	1	2	2	0	1	0	0	6
Apprch %	0	0	0	0	0	20	40	40	0	100	0	0	
Total %	0	0	0	0	0	16.7	33.3	33.3	0	16.7	0	0	

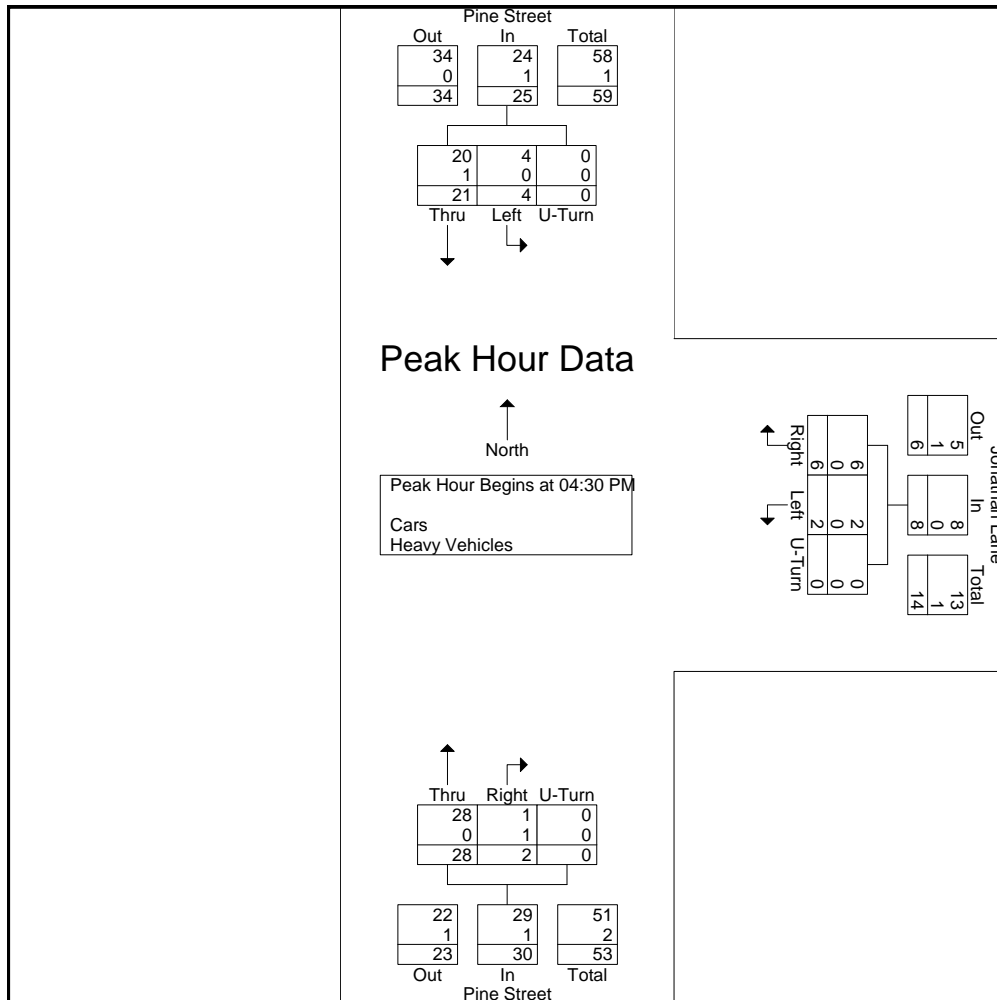
	Pine Street From North					Jonathan Lane From East					Pine Street From South					
Start Time	Thru	Left	Peds EB	Peds WB	App. Total	Right	Left	Peds SB	Peds NB	App. Total	Right	Thru	Peds WB	Peds EB	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 05:00 PM																
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	1	2	2	5	0	0	0	0	0	5
% App. Total	0	0	0	0	0	0	20	40	40		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.500	.500	.625	.000	.000	.000	.000	.000	.625

N/S: Pine Street  
 E: Jonathan Lane  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



File Name : 154611 A  
 Site Code : 82992.15  
 Start Date : 8/27/2015  
 Page No : 1

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	6	0	0	6	5	0	0	5	0	6	0	6	17
04:45 PM	2	3	0	5	0	2	0	2	1	5	0	6	13
05:00 PM	7	1	0	8	0	0	0	0	0	10	0	10	18
05:15 PM	6	0	0	6	1	0	0	1	1	7	0	8	15
Total Volume	21	4	0	25	6	2	0	8	2	28	0	30	63
% App. Total	84	16	0		75	25	0		6.7	93.3	0		
PHF	.750	.333	.000	.781	.300	.250	.000	.400	.500	.700	.000	.750	.875
Cars	20	4	0	24	6	2	0	8	1	28	0	29	61
% Cars	95.2	100	0	96.0	100	100	0	100	50.0	100	0	96.7	96.8
Heavy Vehicles	1	0	0	1	0	0	0	0	1	0	0	1	2
% Heavy Vehicles	4.8	0	0	4.0	0	0	0	0	50.0	0	0	3.3	3.2





PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 AA  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Pine Street From North			Jonathan Lane From East			Pine Street From South			
Start Time	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	Int. Total
11:00 AM	12	0	0	1	0	0	1	5	0	19
11:15 AM	11	0	0	0	0	0	0	7	0	18
11:30 AM	9	1	0	0	1	0	0	7	0	18
11:45 AM	9	1	0	0	0	0	0	6	0	16
Total	41	2	0	1	1	0	1	25	0	71
12:00 PM	10	0	0	0	1	0	0	10	0	21
12:15 PM	13	0	0	1	2	0	0	7	0	23
12:30 PM	5	1	0	0	0	0	1	6	0	13
12:45 PM	12	0	0	0	1	0	0	12	0	25
Total	40	1	0	1	4	0	1	35	0	82
Grand Total	81	3	0	2	5	0	2	60	0	153
Apprch %	96.4	3.6	0	28.6	71.4	0	3.2	96.8	0	
Total %	52.9	2	0	1.3	3.3	0	1.3	39.2	0	
Cars	81	3	0	2	4	0	2	59	0	151
% Cars	100	100	0	100	80	0	100	98.3	0	98.7
Heavy Vehicles	0	0	0	0	1	0	0	1	0	2
% Heavy Vehicles	0	0	0	0	20	0	0	1.7	0	1.3

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	10	0	0	10	0	1	0	1	0	10	0	10	21
12:15 PM	13	0	0	13	1	2	0	3	0	7	0	7	23
12:30 PM	5	1	0	6	0	0	0	0	1	6	0	7	13
12:45 PM	12	0	0	12	0	1	0	1	0	12	0	12	25
Total Volume	40	1	0	41	1	4	0	5	1	35	0	36	82
% App. Total	97.6	2.4	0		20	80	0		2.8	97.2	0		
PHF	.769	.250	.000	.788	.250	.500	.000	.417	.250	.729	.000	.750	.820
Cars	40	1	0	41	1	3	0	4	1	34	0	35	80
% Cars	100	100	0	100	100	75.0	0	80.0	100	97.1	0	97.2	97.6
Heavy Vehicles	0	0	0	0	0	1	0	1	0	1	0	1	2
% Heavy Vehicles	0	0	0	0	0	25.0	0	20.0	0	2.9	0	2.8	2.4



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

**Groups Printed- Cars**

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 AA  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Start Time	Pine Street From North			Jonathan Lane From East			Pine Street From South			Int. Total
	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	
11:00 AM	12	0	0	1	0	0	1	5	0	19
11:15 AM	11	0	0	0	0	0	0	7	0	18
11:30 AM	9	1	0	0	1	0	0	7	0	18
11:45 AM	9	1	0	0	0	0	0	6	0	16
Total	41	2	0	1	1	0	1	25	0	71
12:00 PM	10	0	0	0	0	0	0	9	0	19
12:15 PM	13	0	0	1	2	0	0	7	0	23
12:30 PM	5	1	0	0	0	0	1	6	0	13
12:45 PM	12	0	0	0	1	0	0	12	0	25
Total	40	1	0	1	3	0	1	34	0	80
Grand Total	81	3	0	2	4	0	2	59	0	151
Apprch %	96.4	3.6	0	33.3	66.7	0	3.3	96.7	0	
Total %	53.6	2	0	1.3	2.6	0	1.3	39.1	0	

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	10	0	0	10	0	0	0	0	0	9	0	9	19
12:15 PM	13	0	0	13	1	2	0	3	0	7	0	7	23
12:30 PM	5	1	0	6	0	0	0	0	1	6	0	7	13
12:45 PM	12	0	0	12	0	1	0	1	0	12	0	12	25
Total Volume	40	1	0	41	1	3	0	4	1	34	0	35	80
% App. Total	97.6	2.4	0		25	75	0		2.9	97.1	0		
PHF	.769	.250	.000	.788	.250	.375	.000	.333	.250	.708	.000	.729	.800



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Heavy Vehicles

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 AA  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

	Pine Street From North			Jonathan Lane From East			Pine Street From South			
Start Time	Thru	Left	U-Turn	Right	Left	U-Turn	Right	Thru	U-Turn	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	1	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	2
Grand Total	0	0	0	0	1	0	0	1	0	2
Apprch %	0	0	0	0	100	0	0	100	0	
Total %	0	0	0	0	50	0	0	50	0	

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:15 AM													
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	1	0	1	0	1	0	1	2
Total Volume	0	0	0	0	0	1	0	1	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.000	.250	.250



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Peds and Bikes

N/S: Pine Street  
E: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 AA  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

	Pine Street From North				Jonathan Lane From East				Pine Street From South				Int. Total
Start Time	Thru	Left	Peds EB	Peds WB	Right	Left	Peds SB	Peds NB	Right	Thru	Peds WB	Peds EB	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	6	0	1	0	0	7
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	0	0	6	0	1	0	0	9
Grand Total	2	0	0	0	0	0	0	6	0	1	0	0	9
Apprch %	100	0	0	0	0	0	0	100	0	100	0	0	
Total %	22.2	0	0	0	0	0	0	66.7	0	11.1	0	0	

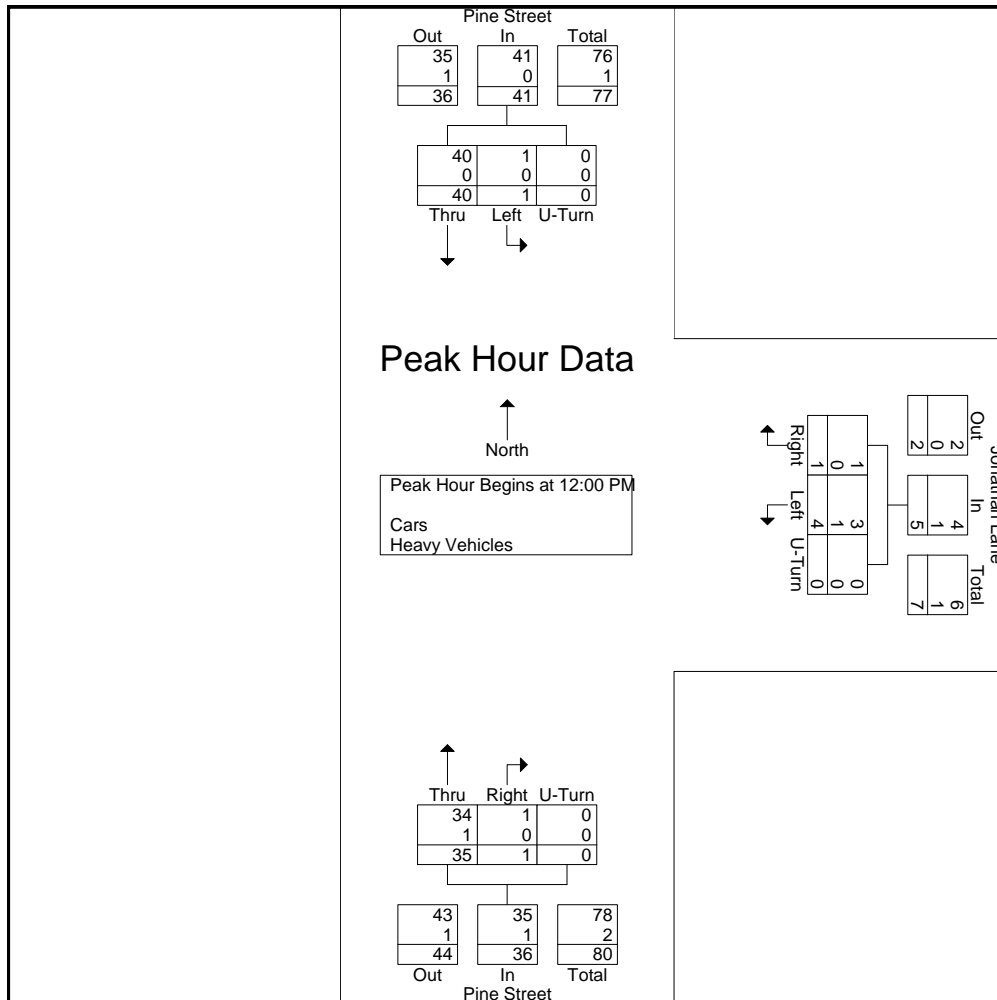
	Pine Street From North					Jonathan Lane From East					Pine Street From South					Int. Total
Start Time	Thru	Left	Peds EB	Peds WB	App. Total	Right	Left	Peds SB	Peds NB	App. Total	Right	Thru	Peds WB	Peds EB	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 11:30 AM																
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	6	6	0	1	0	0	1	7
Total Volume	2	0	0	0	2	0	0	0	6	6	0	1	0	0	1	9
% App. Total	100	0	0	0		0	0	0	100		0	100	0	0		
PHF	.250	.000	.000	.000	.250	.000	.000	.000	.250	.250	.000	.250	.000	.000	.250	.321

N/S: Pine Street  
 E: Jonathan Lane  
 City, State: Sandwich, MA  
 Client: VHB/ P. Dunford



File Name : 154611 AA  
 Site Code : 82992.15  
 Start Date : 8/29/2015  
 Page No : 1

	Pine Street From North				Jonathan Lane From East				Pine Street From South				
Start Time	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	10	0	0	10	0	1	0	1	0	10	0	10	21
12:15 PM	13	0	0	13	1	2	0	3	0	7	0	7	23
12:30 PM	5	1	0	6	0	0	0	0	1	6	0	7	13
12:45 PM	12	0	0	12	0	1	0	1	0	12	0	12	25
Total Volume	40	1	0	41	1	4	0	5	1	35	0	36	82
% App. Total	97.6	2.4	0		20	80	0		2.8	97.2	0		
PHF	.769	.250	.000	.788	.250	.500	.000	.417	.250	.729	.000	.750	.820
Cars	40	1	0	41	1	3	0	4	1	34	0	35	80
% Cars	100	100	0	100	100	75.0	0	80.0	100	97.1	0	97.2	97.6
Heavy Vehicles	0	0	0	0	0	1	0	1	0	1	0	1	2
% Heavy Vehicles	0	0	0	0	0	25.0	0	20.0	0	2.9	0	2.8	2.4



- **Grove Street at Jonathan Lane**



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 B  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Grove Street From North			Grove Street From South			Jonathan Lane From West			Int. Total
	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	
04:00 PM	0	4	0	5	0	0	0	0	0	9
04:15 PM	1	2	0	4	1	0	0	0	0	8
04:30 PM	2	2	0	11	4	0	0	0	0	19
04:45 PM	2	3	0	12	0	0	1	2	0	20
Total	5	11	0	32	5	0	1	2	0	56
05:00 PM	3	0	0	11	0	0	0	0	0	14
05:15 PM	1	1	0	14	0	0	0	2	0	18
05:30 PM	2	0	0	4	0	0	0	0	0	6
05:45 PM	1	0	1	4	0	0	0	2	0	8
Total	7	1	1	33	0	0	0	4	0	46
Grand Total	12	12	1	65	5	0	1	6	0	102
Apprch %	48	48	4	92.9	7.1	0	14.3	85.7	0	
Total %	11.8	11.8	1	63.7	4.9	0	1	5.9	0	
Cars	12	12	1	64	5	0	1	5	0	100
% Cars	100	100	100	98.5	100	0	100	83.3	0	98
Heavy Vehicles	0	0	0	1	0	0	0	1	0	2
% Heavy Vehicles	0	0	0	1.5	0	0	0	16.7	0	2

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	2	2	0	4	11	4	0	15	0	0	0	0	19
04:45 PM	2	3	0	5	12	0	0	12	1	2	0	3	20
05:00 PM	3	0	0	3	11	0	0	11	0	0	0	0	14
05:15 PM	1	1	0	2	14	0	0	14	0	2	0	2	18
Total Volume	8	6	0	14	48	4	0	52	1	4	0	5	71
% App. Total	57.1	42.9	0		92.3	7.7	0		20	80	0		
PHF	.667	.500	.000	.700	.857	.250	.000	.867	.250	.500	.000	.417	.888
Cars	8	6	0	14	48	4	0	52	1	3	0	4	70
% Cars	100	100	0	100	100	100	0	100	100	75.0	0	80.0	98.6
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	1	1
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	25.0	0	20.0	1.4



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 B  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

Groups Printed- Cars

	Grove Street From North			Grove Street From South			Jonathan Lane From West			
Start Time	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	Int. Total
04:00 PM	0	4	0	4	0	0	0	0	0	8
04:15 PM	1	2	0	4	1	0	0	0	0	8
04:30 PM	2	2	0	11	4	0	0	0	0	19
04:45 PM	2	3	0	12	0	0	1	1	0	19
Total	5	11	0	31	5	0	1	1	0	54
05:00 PM	3	0	0	11	0	0	0	0	0	14
05:15 PM	1	1	0	14	0	0	0	2	0	18
05:30 PM	2	0	0	4	0	0	0	0	0	6
05:45 PM	1	0	1	4	0	0	0	2	0	8
Total	7	1	1	33	0	0	0	4	0	46
Grand Total	12	12	1	64	5	0	1	5	0	100
Apprch %	48	48	4	92.8	7.2	0	16.7	83.3	0	
Total %	12	12	1	64	5	0	1	5	0	

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	2	2	0	4	11	4	0	15	0	0	0	0	19
04:45 PM	2	3	0	5	12	0	0	12	1	1	0	2	19
05:00 PM	3	0	0	3	11	0	0	11	0	0	0	0	14
05:15 PM	1	1	0	2	14	0	0	14	0	2	0	2	18
Total Volume	8	6	0	14	48	4	0	52	1	3	0	4	70
% App. Total	57.1	42.9	0		92.3	7.7	0		25	75	0		
PHF	.667	.500	.000	.700	.857	.250	.000	.867	.250	.375	.000	.500	.921



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

File Name : 154611 B  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

**Groups Printed- Heavy Vehicles**

	Grove Street From North			Grove Street From South			Jonathan Lane From West			
Start Time	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	Int. Total
04:00 PM	0	0	0	1	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	1	0	0	0	1	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	0	0	0	1	0	2
Apprch %	0	0	0	100	0	0	0	100	0	
Total %	0	0	0	50	0	0	0	50	0	

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	1	0	0	1	0	1	0	1	2
% App. Total	0	0	0		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.000	.250	.500



P.O.Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

### Groups Printed- Peds and Bikes

[illegible]



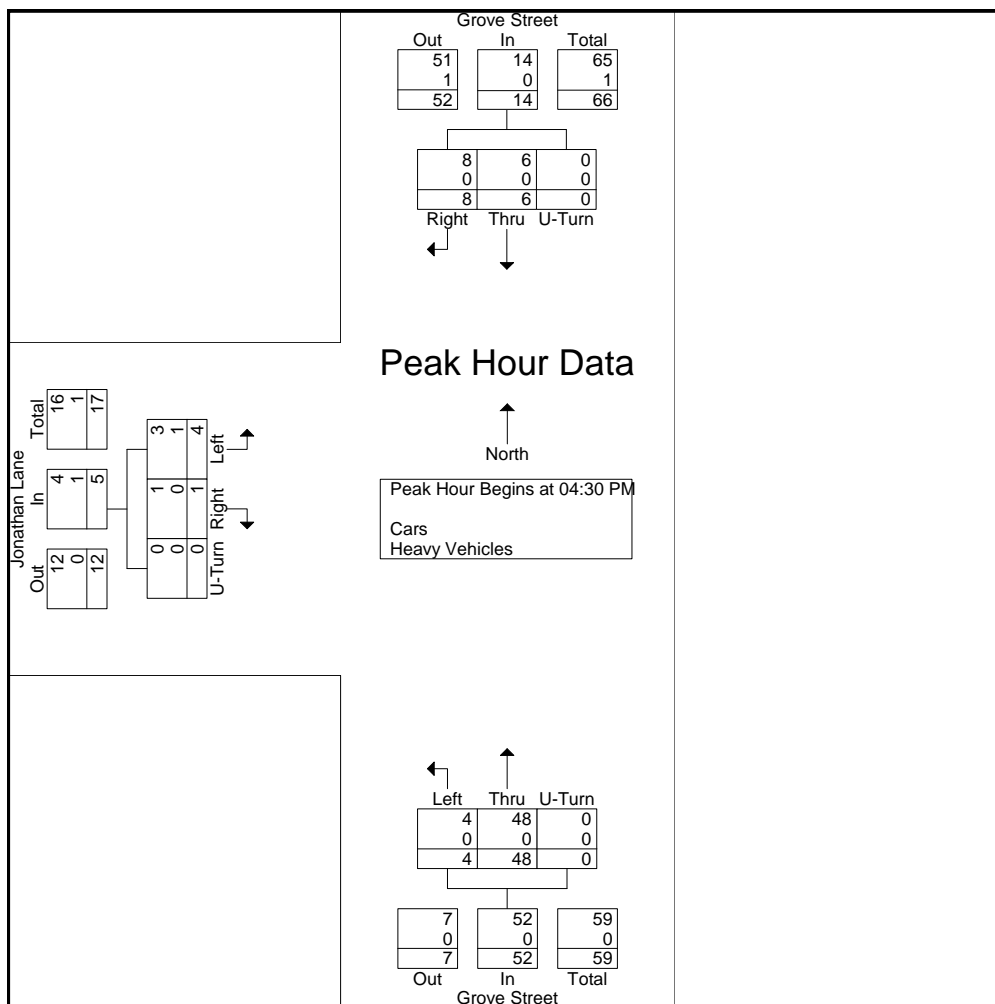
PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 B  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	2	2	0	4	11	4	0	15	0	0	0	0	19
04:45 PM	2	3	0	5	12	0	0	12	1	2	0	3	20
05:00 PM	3	0	0	3	11	0	0	11	0	0	0	0	14
05:15 PM	1	1	0	2	14	0	0	14	0	2	0	2	18
Total Volume	8	6	0	14	48	4	0	52	1	4	0	5	71
% App. Total	57.1	42.9	0		92.3	7.7	0		20	80	0		
PHF	.667	.500	.000	.700	.857	.250	.000	.867	.250	.500	.000	.417	.888
Cars	8	6	0	14	48	4	0	52	1	3	0	4	70
% Cars	100	100	0	100	100	100	0	100	100	75.0	0	80.0	98.6
Heavy Vehicles	0	0	0	0	0	0	0	0	0	1	0	1	1
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	25.0	0	20.0	1.4





PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 BB  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Grove Street From North			Grove Street From South			Jonathan Lane From West			
Start Time	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	Int. Total
11:00 AM	2	7	0	2	0	0	1	2	0	14
11:15 AM	1	15	0	6	0	0	0	0	0	22
11:30 AM	1	9	0	4	0	0	1	1	0	16
11:45 AM	1	13	0	4	0	0	1	0	0	19
Total	5	44	0	16	0	0	3	3	0	71
12:00 PM	1	7	0	10	0	0	0	0	0	18
12:15 PM	2	9	0	7	1	0	0	0	0	19
12:30 PM	1	7	0	8	0	0	1	2	0	19
12:45 PM	1	8	0	6	0	0	0	0	0	15
Total	5	31	0	31	1	0	1	2	0	71
Grand Total	10	75	0	47	1	0	4	5	0	142
Apprch %	11.8	88.2	0	97.9	2.1	0	44.4	55.6	0	
Total %	7	52.8	0	33.1	0.7	0	2.8	3.5	0	
Cars	9	72	0	45	1	0	4	5	0	136
% Cars	90	96	0	95.7	100	0	100	100	0	95.8
Heavy Vehicles	1	3	0	2	0	0	0	0	0	6
% Heavy Vehicles	10	4	0	4.3	0	0	0	0	0	4.2

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:15 AM													
11:15 AM	1	15	0	16	6	0	0	6	0	0	0	0	22
11:30 AM	1	9	0	10	4	0	0	4	1	1	0	2	16
11:45 AM	1	13	0	14	4	0	0	4	1	0	0	1	19
12:00 PM	1	7	0	8	10	0	0	10	0	0	0	0	18
Total Volume	4	44	0	48	24	0	0	24	2	1	0	3	75
% App. Total	8.3	91.7	0		100	0	0		66.7	33.3	0		
PHF	1.00	.733	.000	.750	.600	.000	.000	.600	.500	.250	.000	.375	.852
Cars	3	42	0	45	23	0	0	23	2	1	0	3	71
% Cars	75.0	95.5	0	93.8	95.8	0	0	95.8	100	100	0	100	94.7
Heavy Vehicles	1	2	0	3	1	0	0	1	0	0	0	0	4
% Heavy Vehicles	25.0	4.5	0	6.3	4.2	0	0	4.2	0	0	0	0	5.3



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 BB  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Groups Printed- Cars

	Grove Street From North			Grove Street From South			Jonathan Lane From West			
Start Time	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	Int. Total
11:00 AM	2	6	0	1	0	0	1	2	0	12
11:15 AM	1	15	0	6	0	0	0	0	0	22
11:30 AM	1	8	0	4	0	0	1	1	0	15
11:45 AM	1	13	0	4	0	0	1	0	0	19
Total	5	42	0	15	0	0	3	3	0	68
12:00 PM	0	6	0	9	0	0	0	0	0	15
12:15 PM	2	9	0	7	1	0	0	0	0	19
12:30 PM	1	7	0	8	0	0	1	2	0	19
12:45 PM	1	8	0	6	0	0	0	0	0	15
Total	4	30	0	30	1	0	1	2	0	68
Grand Total	9	72	0	45	1	0	4	5	0	136
Apprch %	11.1	88.9	0	97.8	2.2	0	44.4	55.6	0	
Total %	6.6	52.9	0	33.1	0.7	0	2.9	3.7	0	

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:45 AM													
11:45 AM	1	13	0	14	4	0	0	4	1	0	0	1	19
12:00 PM	0	6	0	6	9	0	0	9	0	0	0	0	15
12:15 PM	2	9	0	11	7	1	0	8	0	0	0	0	19
12:30 PM	1	7	0	8	8	0	0	8	1	2	0	3	19
Total Volume	4	35	0	39	28	1	0	29	2	2	0	4	72
% App. Total	10.3	89.7	0		96.6	3.4	0		50	50	0		
PHF	.500	.673	.000	.696	.778	.250	.000	.806	.500	.250	.000	.333	.947



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 BB  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

**Groups Printed- Heavy Vehicles**

	Grove Street From North			Grove Street From South			Jonathan Lane From West			
Start Time	Right	Thru	U-Turn	Thru	Left	U-Turn	Right	Left	U-Turn	Int. Total
11:00 AM	0	1	0	1	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	1	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	1	0	0	0	0	0	3
12:00 PM	1	1	0	1	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	1	0	0	0	0	0	3
Grand Total	1	3	0	2	0	0	0	0	0	6
Apprch %	25	75	0	100	0	0	0	0	0	
Total %	16.7	50	0	33.3	0	0	0	0	0	

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:15 AM													
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	1	1	0	2	1	0	0	1	0	0	0	0	3
Total Volume	1	2	0	3	1	0	0	1	0	0	0	0	4
% App. Total	33.3	66.7	0		100	0	0		0	0	0		
PHF	.250	.500	.000	.375	.250	.000	.000	.250	.000	.000	.000	.000	.333



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Peds and Bikes

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 BB  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Start Time	Grove Street From North				Grove Street From South				Jonathan Lane From West				Int. Total
	Right	Thru	Peds EB	Peds WB	Thru	Left	Peds WB	Peds EB	Right	Left	Peds NB	Peds SB	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	0	0	0	0	0	0	0	0	0	0	100	
Total %	0	0	0	0	0	0	0	0	0	0	0	100	

	Grove Street From North					Grove Street From South					Jonathan Lane From West					
Start Time	Right	Thru	Peds EB	Peds WB	App. Total	Thru	Left	Peds WB	Peds EB	App. Total	Right	Left	Peds NB	Peds SB	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 11:00 AM																
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250



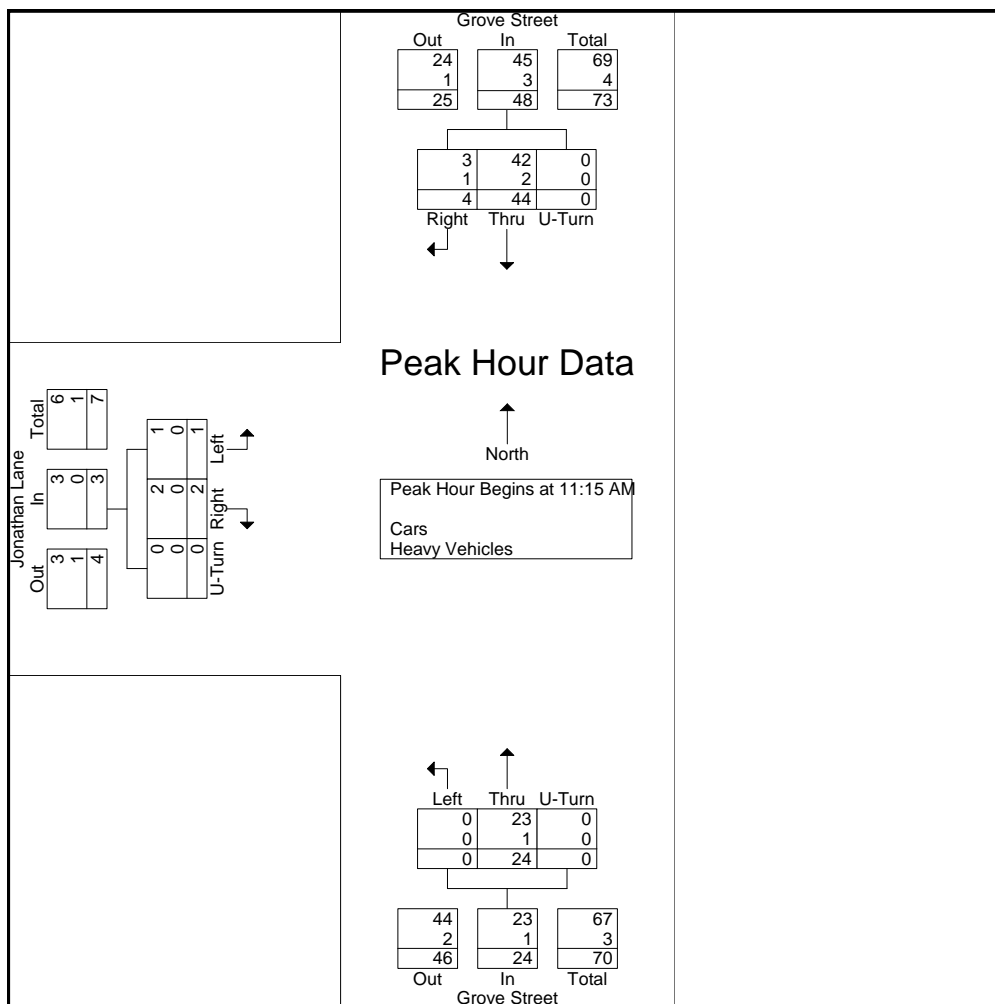
PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Grove Street  
W: Jonathan Lane  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 BB  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

	Grove Street From North				Grove Street From South				Jonathan Lane From West				
Start Time	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:15 AM													
11:15 AM	1	15	0	16	6	0	0	6	0	0	0	0	22
11:30 AM	1	9	0	10	4	0	0	4	1	1	0	2	16
11:45 AM	1	13	0	14	4	0	0	4	1	0	0	1	19
12:00 PM	1	7	0	8	10	0	0	10	0	0	0	0	18
Total Volume	4	44	0	48	24	0	0	24	2	1	0	3	75
% App. Total	8.3	91.7	0		100	0	0		66.7	33.3	0		
PHF	1.00	.733	.000	.750	.600	.000	.000	.600	.500	.250	.000	.375	.852
Cars	3	42	0	45	23	0	0	23	2	1	0	3	71
% Cars	75.0	95.5	0	93.8	95.8	0	0	95.8	100	100	0	100	94.7
Heavy Vehicles	1	2	0	3	1	0	0	1	0	0	0	0	4
% Heavy Vehicles	25.0	4.5	0	6.3	4.2	0	0	4.2	0	0	0	0	5.3



- **Shawme Road at Highview Drive**



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 C  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

Groups Printed- Cars - Heavy Vehicles

	Shawme Road From North				Highview Drive From East				Shawme Road From South				Highview Drive From West				Int. Total
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	1	3	3	0	0	0	0	0	0	0	0	0	1	0	0	0	8
04:15 PM	0	1	0	0	1	4	0	0	0	1	0	0	0	0	0	0	7
04:30 PM	0	2	1	0	1	3	0	0	0	1	2	0	1	2	0	0	13
04:45 PM	0	3	0	0	3	1	0	0	0	0	1	0	4	3	1	0	16
Total	1	9	4	0	5	8	0	0	0	2	3	0	6	5	1	0	44
05:00 PM	0	3	1	0	0	2	0	0	0	0	2	0	0	2	0	0	10
05:15 PM	0	4	0	0	0	3	0	1	1	1	1	0	0	0	0	0	11
05:30 PM	0	1	1	0	1	0	0	0	0	0	1	0	1	0	0	0	5
05:45 PM	0	1	0	0	0	2	0	0	0	0	1	0	1	0	0	0	5
Total	0	9	2	0	1	7	0	1	1	1	5	0	2	2	0	0	31
Grand Total	1	18	6	0	6	15	0	1	1	3	8	0	8	7	1	0	75
Apprch %	4	72	24	0	27.3	68.2	0	4.5	8.3	25	66.7	0	50	43.8	6.2	0	
Total %	1.3	24	8	0	8	20	0	1.3	1.3	4	10.7	0	10.7	9.3	1.3	0	
Cars	1	18	6	0	6	15	0	1	0	3	7	0	7	7	1	0	72
% Cars	100	100	100	0	100	100	0	100	0	100	87.5	0	87.5	100	100	0	96
Heavy Vehicles	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	3
% Heavy Vehicles	0	0	0	0	0	0	0	0	100	0	12.5	0	12.5	0	0	0	4

	Shawme Road From North					Highview Drive From East					Shawme Road From South					Highview Drive From West					Int. Total
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	2	1	0	3	1	3	0	0	4	0	1	2	0	3	1	2	0	0	3	13
04:45 PM	0	3	0	0	3	3	1	0	0	4	0	0	1	0	1	4	3	1	0	8	16
05:00 PM	0	3	1	0	4	0	2	0	0	2	0	0	2	0	2	0	2	0	0	2	10
05:15 PM	0	4	0	0	4	0	3	0	1	4	1	1	1	0	3	0	0	0	0	0	11
Total Volume	0	12	2	0	14	4	9	0	1	14	1	2	6	0	9	5	7	1	0	13	50
% App. Total	0	85.7	14.3	0		28.6	64.3	0	7.1		11.1	22.2	66.7	0		38.5	53.8	7.7	0		
PHF	.000	.750	.500	.000	.875	.333	.750	.000	.250	.875	.250	.500	.750	.000	.750	.313	.583	.250	.000	.406	.781
Cars	0	12	2	0	14	4	9	0	1	14	0	2	5	0	7	4	7	1	0	12	47
% Cars	0	100	100	0	100	100	100	0	100	100	0	100	83.3	0	77.8	80.0	100	100	0	92.3	94.0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	100	0	16.7	0	22.2	20.0	0	0	0	7.7	6.0



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Cars

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 C  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

	Shawme Road From North				Highview Drive From East				Shawme Road From South				Highview Drive From West				Int. Total
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	1	3	3	0	0	0	0	0	0	0	0	0	1	0	0	0	8
04:15 PM	0	1	0	0	1	4	0	0	0	1	0	0	0	0	0	0	7
04:30 PM	0	2	1	0	1	3	0	0	0	1	1	0	1	2	0	0	12
04:45 PM	0	3	0	0	3	1	0	0	0	0	1	0	3	3	1	0	15
Total	1	9	4	0	5	8	0	0	0	2	2	0	5	5	1	0	42
05:00 PM	0	3	1	0	0	2	0	0	0	0	2	0	0	2	0	0	10
05:15 PM	0	4	0	0	0	3	0	1	0	1	1	0	0	0	0	0	10
05:30 PM	0	1	1	0	1	0	0	0	0	0	1	0	1	0	0	0	5
05:45 PM	0	1	0	0	0	2	0	0	0	0	1	0	1	0	0	0	5
Total	0	9	2	0	1	7	0	1	0	1	5	0	2	2	0	0	30
Grand Total	1	18	6	0	6	15	0	1	0	3	7	0	7	7	1	0	72
Apprch %	4	72	24	0	27.3	68.2	0	4.5	0	30	70	0	46.7	46.7	6.7	0	
Total %	1.4	25	8.3	0	8.3	20.8	0	1.4	0	4.2	9.7	0	9.7	9.7	1.4	0	

	Shawme Road From North					Highview Drive From East					Shawme Road From South					Highview Drive From West					Int. Total
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	2	1	0	3	1	3	0	0	4	0	1	1	0	2	1	2	0	0	3	12
04:45 PM	0	3	0	0	3	3	1	0	0	4	0	0	1	0	1	3	3	1	0	7	15
05:00 PM	0	3	1	0	4	0	2	0	0	2	0	0	2	0	2	0	2	0	0	2	10
05:15 PM	0	4	0	0	4	0	3	0	1	4	0	1	1	0	2	0	0	0	0	0	10
Total Volume	0	12	2	0	14	4	9	0	1	14	0	2	5	0	7	4	7	1	0	12	47
% App. Total	0	85.7	14.3	0		28.6	64.3	0	7.1		0	28.6	71.4	0		33.3	58.3	8.3	0		
PHF	.000	.750	.500	.000	.875	.333	.750	.000	.250	.875	.000	.500	.625	.000	.875	.333	.583	.250	.000	.429	.783



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Heavy Vehicles

File Name : 154611 C  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

	Shawme Road From North				Highview Drive From East				Shawme Road From South				Highview Drive From West				Int. Total
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	3
Apprch %	0	0	0	0	0	0	0	0	50	0	50	0	100	0	0	0	
Total %	0	0	0	0	0	0	0	0	33.3	0	33.3	0	33.3	0	0	0	

	Shawme Road From North					Highview Drive From East					Shawme Road From South					Highview Drive From West					Int. Total
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
% App. Total	0	0	0	0	0	0	0	0	0	0	50	0	50	0		100	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.500	.250	.000	.000	.000	.250	.750



P.O.Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

### Groups Printed- Peds and Bikes

[illegible]



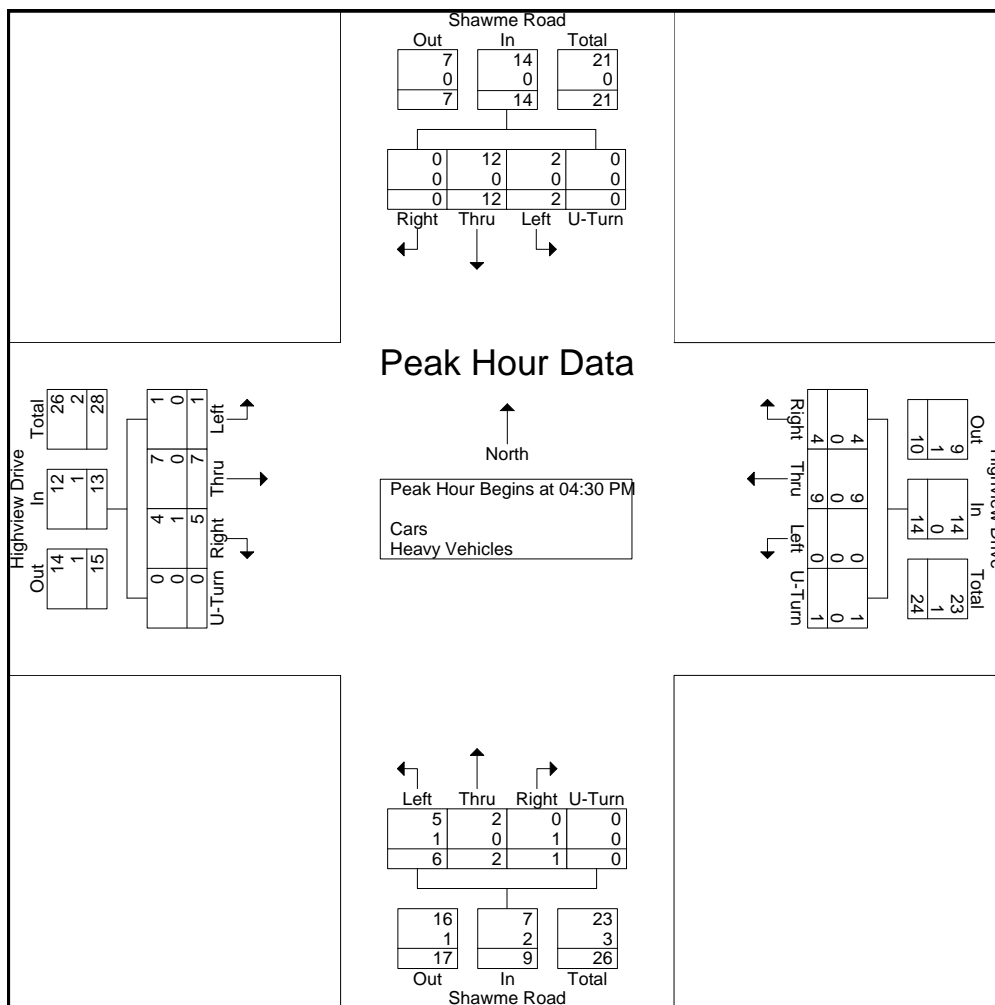
PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdilc.com

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 C  
Site Code : 82992.15  
Start Date : 8/27/2015  
Page No : 1

	Shawme Road From North					Highview Drive From East					Shawme Road From South					Highview Drive From West					
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	2	1	0	3	1	3	0	0	4	0	1	2	0	3	1	2	0	0	3	13
04:45 PM	0	3	0	0	3	3	1	0	0	4	0	0	1	0	1	4	3	1	0	8	16
05:00 PM	0	3	1	0	4	0	2	0	0	2	0	0	2	0	2	0	2	0	0	2	10
05:15 PM	0	4	0	0	4	0	3	0	1	4	1	1	1	0	3	0	0	0	0	0	11
Total Volume	0	12	2	0	14	4	9	0	1	14	1	2	6	0	9	5	7	1	0	13	50
% App. Total	0	85.7	14.3	0		28.6	64.3	0	7.1		11.1	22.2	66.7	0		38.5	53.8	7.7	0		
PHF	.000	.750	.500	.000	.875	.333	.750	.000	.250	.875	.250	.500	.750	.000	.750	.313	.583	.250	.000	.406	.781
Cars	0	12	2	0	14	4	9	0	1	14	0	2	5	0	7	4	7	1	0	12	47
% Cars	0	100	100	0	100	100	100	0	100	100	0	100	83.3	0	77.8	80.0	100	100	0	92.3	94.0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	100	0	16.7	0	22.2	20.0	0	0	0	7.7	6.0





P.O.Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

File Name : 154611 CC  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

[illegible][illegible]



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Cars

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 CC  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

	Shawme Road From North				Highview Drive From East				Pine Street From South				Highview Drive From West				Int. Total
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	
11:00 AM	0	1	0	0	3	2	1	0	0	0	2	0	1	1	0	0	11
11:15 AM	1	1	0	0	4	1	0	0	0	0	0	0	0	3	1	0	11
11:30 AM	1	0	0	0	2	1	0	0	0	1	0	0	0	3	1	0	9
11:45 AM	0	0	0	0	0	3	0	0	0	1	1	0	1	1	0	0	7
Total	2	2	0	0	9	7	1	0	0	2	3	0	2	8	2	0	38
12:00 PM	0	0	1	0	0	2	0	0	0	1	3	0	0	1	1	0	9
12:15 PM	2	1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	7
12:30 PM	0	0	0	0	0	1	0	0	0	1	2	0	1	1	1	0	7
12:45 PM	0	2	0	0	1	2	0	0	0	1	1	0	1	4	0	0	12
Total	2	3	1	0	1	6	0	0	0	4	6	0	2	8	2	0	35
Grand Total	4	5	1	0	10	13	1	0	0	6	9	0	4	16	4	0	73
Apprch %	40	50	10	0	41.7	54.2	4.2	0	0	40	60	0	16.7	66.7	16.7	0	
Total %	5.5	6.8	1.4	0	13.7	17.8	1.4	0	0	8.2	12.3	0	5.5	21.9	5.5	0	

	Shawme Road From North					Highview Drive From East					Pine Street From South					Highview Drive From West					Int. Total
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	0	1	0	0	1	3	2	1	0	6	0	0	2	0	2	1	1	0	0	2	11
11:15 AM	1	1	0	0	2	4	1	0	0	5	0	0	0	0	0	0	3	1	0	4	11
11:30 AM	1	0	0	0	1	2	1	0	0	3	0	1	0	0	1	0	3	1	0	4	9
11:45 AM	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	1	1	0	0	2	7
Total Volume	2	2	0	0	4	9	7	1	0	17	0	2	3	0	5	2	8	2	0	12	38
% App. Total	50	50	0	0		52.9	41.2	5.9	0		0	40	60	0		16.7	66.7	16.7	0		
PHF	.500	.500	.000	.000	.500	.563	.583	.250	.000	.708	.000	.500	.375	.000	.625	.500	.667	.500	.000	.750	.864



P.O.Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

File Name : 154611 CC  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

[illegible]



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

Groups Printed- Peds and Bikes

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 CC  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

Start Time	Shawme Road From North						Highview Drive From East						Pine Street From South						Highview Drive From West						Int. Total
	Right	Thru	Left	Peds EB	Peds WB		Right	Thru	Left	Peds SB	Peds NB		Right	Thru	Left	Peds WB	Peds EB		Right	Thru	Left	Peds NB	Peds SB		
11:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0
11:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0
11:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0
11:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	1		1
Total	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	1		1
12:00 PM	0	0	2	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2
12:15 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0
12:30 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0
12:45 PM	0	0	0	0	0		0	0	0	0	0		0	1	0	0	0		0	0	0	0	0		1
Total	0	0	2	0	0		0	0	0	0	0		0	1	0	0	0		0	0	0	0	0		3
Grand Total	0	0	2	0	0		0	0	0	0	0		0	1	0	0	0		0	0	0	0	1		4
Apprch %	0	0	100	0	0		0	0	0	0	0		0	100	0	0	0		0	0	0	0	100		
Total %	0	0	50	0	0		0	0	0	0	0		0	25	0	0	0		0	0	0	0	25		

	Shawme Road From North						Highview Drive From East						Pine Street From South						Highview Drive From West							
Start Time	Right	Thru	Left	Peds EB	Peds WB	App. Total	Right	Thru	Left	Peds SB	Peds NB	App. Total	Right	Thru	Left	Peds WB	Peds EB	App. Total	Right	Thru	Left	Peds NB	Peds SB	App. Total	Int. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 11:15 AM																										
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
12:00 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Total Volume	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	
% App. Total	0	0	100	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	100			
PHF	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250		.375	



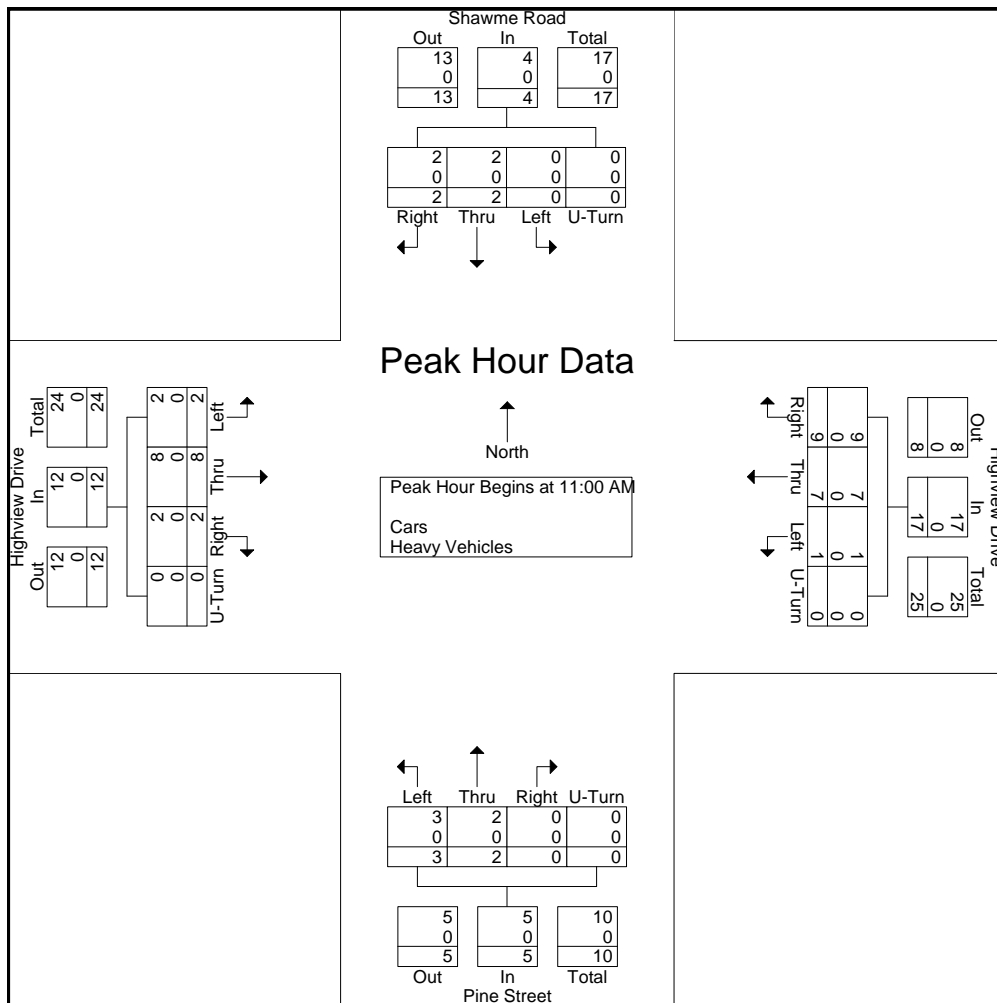
PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: datarequests@pdillc.com

N/S: Shawme Road  
E/W: Highview Drive  
City, State: Sandwich, MA  
Client: VHB/ P. Dunford

File Name : 154611 CC  
Site Code : 82992.15  
Start Date : 8/29/2015  
Page No : 1

	Shawme Road From North					Highview Drive From East					Pine Street From South					Highview Drive From West					
Start Time	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	0	1	0	0	1	3	2	1	0	6	0	0	2	0	2	1	1	0	0	2	11
11:15 AM	1	1	0	0	2	4	1	0	0	5	0	0	0	0	0	0	3	1	0	4	11
11:30 AM	1	0	0	0	1	2	1	0	0	3	0	1	0	0	1	0	3	1	0	4	9
11:45 AM	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	1	1	0	0	2	7
Total Volume	2	2	0	0	4	9	7	1	0	17	0	2	3	0	5	2	8	2	0	12	38
% App. Total	50	50	0	0		52.9	41.2	5.9	0		0	40	60	0		16.7	66.7	16.7	0		
PHF	.500	.500	.000	.000	.500	.563	.583	.250	.000	.708	.000	.500	.375	.000	.625	.500	.667	.500	.000	.750	.864
Cars	2	2	0	0	4	9	7	1	0	17	0	2	3	0	5	2	8	2	0	12	38
% Cars	100	100	0	0	100	100	100	100	0	100	0	100	100	0	100	100	100	0	0	100	100
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## ➤ **Capacity Analysis**

- **Pine Street at Jonathan Lane**

Adventure Park at Heritage Museums and Gardens  
1: Pine Street & Jonathan Road

Weekday PM Peak

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	2	6	28	2	4	21
Conflicting Peds, #/hr	1	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	40	40	75	75	78	78
Heavy Vehicles, %	0	0	0	50	0	5
Mvmt Flow	5	15	37	3	5	27
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	77	41	0	0	41	0
Stage 1	40	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	931	1036	-	-	1581	-
Stage 1	988	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	927	1034	-	-	1580	-
Mov Cap-2 Maneuver	927	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.7		0		1.2	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	1005	1580	-	
HCM Lane V/C Ratio	-	-	0.02	0.003	-	
HCM Control Delay (s)	-	-	8.7	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Adventure Park at Heritage Museums and Gardens  
1: Pine Street & Jonathan Road

Saturday Midday Peak

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	4	1	35	1	1	40
Conflicting Peds, #/hr	6	6	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	42	42	75	75	79	79
Heavy Vehicles, %	25	0	3	0	0	0
Mvmt Flow	10	2	47	1	1	51
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	106	59	0	0	54	0
Stage 1	53	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.65	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	839	1012	-	-	1564	-
Stage 1	914	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	830	1002	-	-	1556	-
Mov Cap-2 Maneuver	830	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9.2		0		0.2	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	860	1556	-	
HCM Lane V/C Ratio	-	-	0.014	0.001	-	
HCM Control Delay (s)	-	-	9.2	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

- **Grove Street at Jonathan Lane**

Adventure Park at Heritage Museums and Gardens  
2: Grove Street & Jonathan Road

Weekday PM Peak

Intersection							
Int Delay, s/veh	1.6						
Movement	EBL	EBR		NBL	NBT	SBT	SBR
Vol, veh/h	4	1		4	48	6	8
Conflicting Peds, #/hr	0	0		0	0	0	0
Sign Control	Stop	Stop		Free	Free	Free	Free
RT Channelized	-	None		-	None	-	None
Storage Length	0	-		-	-	-	-
Veh in Median Storage, #	0	-		-	0	0	-
Grade, %	0	-		-	0	0	-
Peak Hour Factor	42	42		87	87	70	70
Heavy Vehicles, %	25	0		0	0	0	0
Mvmt Flow	10	2		5	55	9	11
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	78	14		20	0	-	0
Stage 1	14	-		-	-	-	-
Stage 2	64	-		-	-	-	-
Critical Hdwy	6.65	6.2		4.1	-	-	-
Critical Hdwy Stg 1	5.65	-		-	-	-	-
Critical Hdwy Stg 2	5.65	-		-	-	-	-
Follow-up Hdwy	3.725	3.3		2.2	-	-	-
Pot Cap-1 Maneuver	871	1072		1609	-	-	-
Stage 1	952	-		-	-	-	-
Stage 2	903	-		-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	868	1072		1609	-	-	-
Mov Cap-2 Maneuver	868	-		-	-	-	-
Stage 1	952	-		-	-	-	-
Stage 2	900	-		-	-	-	-
Approach	EB		NB		SB		
HCM Control Delay, s	9		0.6		0		
HCM LOS	A						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1609	-	902	-	-		
HCM Lane V/C Ratio	0.003	-	0.013	-	-		
HCM Control Delay (s)	7.2	0	9	-	-		
HCM Lane LOS	A	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	0	-	-		

Adventure Park at Heritage Museums and Gardens  
2: Grove Street & Jonathan Road

Saturday Midday Peak

Intersection							
Int Delay, s/veh	0.6						
Movement	EBL	EBR		NBL	NBT	SBT	SBR
Vol, veh/h	1	2		0	24	44	4
Conflicting Peds, #/hr	1	1		1	0	0	1
Sign Control	Stop	Stop		Free	Free	Free	Free
RT Channelized	-	None		-	None	-	None
Storage Length	0	-		-	-	-	-
Veh in Median Storage, #	0	-		-	0	0	-
Grade, %	0	-		-	0	0	-
Peak Hour Factor	38	38		60	60	75	75
Heavy Vehicles, %	0	0		0	4	5	25
Mvmt Flow	3	5		0	40	59	5
Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	102	63		65	0	-	0
Stage 1	62	-		-	-	-	-
Stage 2	40	-		-	-	-	-
Critical Hdwy	6.4	6.2		4.1	-	-	-
Critical Hdwy Stg 1	5.4	-		-	-	-	-
Critical Hdwy Stg 2	5.4	-		-	-	-	-
Follow-up Hdwy	3.5	3.3		2.2	-	-	-
Pot Cap-1 Maneuver	901	1007		1550	-	-	-
Stage 1	966	-		-	-	-	-
Stage 2	988	-		-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	899	1005		1549	-	-	-
Mov Cap-2 Maneuver	899	-		-	-	-	-
Stage 1	965	-		-	-	-	-
Stage 2	987	-		-	-	-	-
Approach	EB	NB			SB		
HCM Control Delay, s	8.8	0			0		
HCM LOS	A						
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	1549	-	967	-	-		
HCM Lane V/C Ratio	-	-	0.008	-	-		
HCM Control Delay (s)	0	-	8.8	-	-		
HCM Lane LOS	A	-	A	-	-		
HCM 95th %tile Q(veh)	0	-	0	-	-		

- **Shawme Road at Highview Drive**

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Weekday PM Peak

Intersection									
Int Delay, s/veh	6.7								
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	1	7	5	0	9	4	6	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	41	41	41	88	88	88	75	75	75
Heavy Vehicles, %	0	0	20	0	0	0	17	0	100
Mvmt Flow	2	17	12	0	10	5	8	3	1
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	45	38	14	52	37	3	14	0	0
Stage 1	18	18	-	19	19	-	-	-	-
Stage 2	27	20	-	33	18	-	-	-	-
Critical Hdwy	7.1	6.5	6.4	7.1	6.5	6.2	4.27	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.48	3.5	4	3.3	2.353	-	-
Pot Cap-1 Maneuver	962	858	1016	952	859	1087	1512	-	-
Stage 1	1006	884	-	1005	884	-	-	-	-
Stage 2	996	883	-	988	884	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	945	853	1016	922	854	1087	1512	-	-
Mov Cap-2 Maneuver	945	853	-	922	854	-	-	-	-
Stage 1	1001	883	-	1000	880	-	-	-	-
Stage 2	975	879	-	956	883	-	-	-	-
Approach	EB			WB			NB		
HCM Control Delay, s	9.1			9			4.9		
HCM LOS	A			A					
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	1512	-	-	916	914	1631	-	-	
HCM Lane V/C Ratio	0.005	-	-	0.035	0.016	0.001	-	-	
HCM Control Delay (s)	7.4	0	-	9.1	9	7.2	0	-	
HCM Lane LOS	A	A	-	A	A	A	A	-	
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-	

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Weekday PM Peak

<b>Intersection</b>			
Int Delay, s/veh			
<b>Movement</b>	<b>SBL</b>	<b>SBT</b>	<b>SBR</b>
Vol, veh/h	2	12	0
Conflicting Peds, #/hr	0	0	0
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	88	88	88
Heavy Vehicles, %	0	0	0
Mvmt Flow	2	14	0
<b>Major/Minor</b>	<b>Major2</b>		
Conflicting Flow All	4	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1631	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1631	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-
<b>Approach</b>	<b>SB</b>		
HCM Control Delay, s	1		
HCM LOS			
<b>Minor Lane/Major Mvmt</b>			

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Saturday Midday Peak

Intersection									
Int Delay, s/veh	7								
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Vol, veh/h	2	8	2	1	7	9	3	2	0
Conflicting Peds, #/hr	1	0	1	0	0	0	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	71	71	71	63	63	63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	11	3	1	10	13	5	3	0
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	31	20	8	27	22	4	9	0	0
Stage 1	7	7	-	13	13	-	-	-	-
Stage 2	24	13	-	14	9	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-
Pot Cap-1 Maneuver	982	878	1080	988	876	1085	1624	-	-
Stage 1	1020	894	-	1013	889	-	-	-	-
Stage 2	999	889	-	1011	892	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	958	875	1078	973	873	1084	1623	-	-
Mov Cap-2 Maneuver	958	875	-	973	873	-	-	-	-
Stage 1	1016	893	-	1010	886	-	-	-	-
Stage 2	973	886	-	996	891	-	-	-	-
Approach	EB			WB			NB		
HCM Control Delay, s	9			8.8			4.3		
HCM LOS	A			A					
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	1623	-	-	917	980	1631	-	-	
HCM Lane V/C Ratio	0.003	-	-	0.017	0.024	-	-	-	
HCM Control Delay (s)	7.2	0	-	9	8.8	0	-	-	
HCM Lane LOS	A	A	-	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-	

Adventure Park at Heritage Museums and Gardens  
3: Shawme Road & Highview Drive

Saturday Midday Peak

<b>Intersection</b>			
Int Delay, s/veh			
<b>Movement</b>	<b>SBL</b>	<b>SBT</b>	<b>SBR</b>
Vol, veh/h	0	2	2
Conflicting Peds, #/hr	0	0	1
Sign Control	Free	Free	Free
RT Channelized	-	-	None
Storage Length	-	-	-
Veh in Median Storage, #	-	0	-
Grade, %	-	0	-
Peak Hour Factor	50	50	50
Heavy Vehicles, %	0	0	0
Mvmt Flow	0	4	4
<b>Major/Minor</b>	<b>Major2</b>		
Conflicting Flow All	3	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	1632	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1631	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-
<b>Approach</b>	<b>SB</b>		
HCM Control Delay, s	0		
HCM LOS			
<b>Minor Lane/Major Mvmt</b>			

➤ **Parking Counts**



PRECISION  
D A T A  
INDUSTRIES, LLC

P.O. Box 301 Berlin, MA 01503  
Office: 508.481.3999 Fax: 508.545.1234  
Email: [datarequests@pdillc.com](mailto:datarequests@pdillc.com)

Title           **Advanture Park Sandwich Parking Study**

PDI Project #                   154611  
VHB Project                   82992.15

**Date:**                   **Thursday 8/27/15**

<u>Time</u>	<u>Total # Cars</u>	<u>Parked Cars On Pocasset St near Entrance</u>
1:00 PM	48	0
1:30 PM	43	0
2:00 PM	36	0
2:30 PM	40	0
3:00 PM	33	0
3:30 PM	27	0
4:00 PM	27	0

**Date:**                   **Saturday 8/29/15**

<u>Time</u>	<u>Total # Cars</u>	
1:00 AM	49	0
1:30 AM	47	0
2:00 AM	40	0
2:30 AM	31	0
3:00 AM	30	0
3:30 AM	31	0
4:00 AM	28	0